Green Physical Needs Assessment Tool

Revised User Guide

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Purpose

Applicability

This U.S Department of Housing and Urban Development (HUD) Office of Public and Indian Housing (PIH) Green Physical Needs Assessment (GPNA) Tool Guide assists you in preparing your GPNA by guiding you through the GPNA process using HUD's GPNA tool.

The GPNA tool allows both small and large Public Housing Authorities (PHAs) to assess the needs of their public housing portfolio for a term of up to 20 years.

The primary goals of the GPNA are to:

- Enable HUD to measure the impact of annual Capital Fund appropriations for the physical needs of the public housing inventory.
- Evolve PHA management practices toward a Development/AMP-based capital planning strategy.
- Achieve energy integration goals outlined within the 2005 Energy Policy Act.
- Produce data on sustainable activities for the Capital Fund and support HUD's high-priority performance goal to create energy-efficient housing.
- Enable PHAs to better assess the position of their portfolios and take advantage of potential opportunities.

The results of your GPNA:

- Help to identify and prioritize work to be performed at each Development/AMP with Capital Funds and other funding sources.
- Help to make long-term strategic decisions regarding housing portfolios.
- Help to evaluate modernization, repositioning, redevelopment, and inventory removal decisions on the Development/AMP level.

Each year, Capital Funds are provided to PHAs to modernize or otherwise develop public housing. The GPNA tool enables HUD to measure the impact of these funds on the public housing portfolio by aggregating the needs data generated by PHAs. The GPNA will be updated annually to ensure any changes in specific needs are reflected and activities that address needs are recorded. The full GPNA is intended to be repeated every 5 years to update cost information, to reflect new needs, and to establish an ongoing basis for strategic planning.

The 20 year assessment term provides greater planning visibility, particularly for major projects which tend to occur less frequently. Development/AMP-based GPNAs combined with HUD's focus on the Development/AMP-based Asset Management Program ensure PHAs rely on standard industry practices for effective capital planning.

The 2005 Energy Policy Act amended the Capital Fund section of the U.S. Housing Act of 1937 to encourage the integration of "utility management and capital planning to

maximize energy conservation and efficiency measures." HUD's Agency Performance Goals include a commitment to creating energy efficient housing through energy conservation and green retrofits. The GPNA tool integrates potential energy conservation measures identified by the Energy Audit and assists PHAs in evaluating the cost effectiveness of replacing building systems and other components at the end of their useful life. The GPNA will integrate energy efficient and green improvements into future PHA capital planning, and enable HUD to measure progress toward achieving energy-efficient, green public housing.

An important objective of the GPNA tool is for PHAs to engage in an effective Development/AMP-based strategic planning process. The GPNA will enable PHAs to take advantage of new funding opportunities as capital markets change and new programs or incentives are offered. A PNA is a foundation document for a number of real estate management activities including annual budgeting, financing, reserve calculations, appraisals, buying or selling real estate, and preventative maintenance schedules.

The GPNA tool is a standalone Windows-based Microsoft Access® application that can be installed on any Windows-compatible computer. This tool is compatible with desktop PCs, notebook PCs, and/or Windows-compatible network computers. The GPNA tool is available for download on HUD's website. The GPNA tool can be pre-populated with information specific to your PHA, along with Development/AMP, building, and unit data from current Inventory Management System/PIH Information Center (IMS-PIC or PIC) records in order to help you start the GPNA process more quickly. You can also customize the GPNA to meet your more specific local area needs.

As a strategic planning tool for PHAs, the GPNA is less focused on reporting to HUD and more focused on recording real information that is useful to the PHA for its planning purposes. The tool allows for considerable customization and judgment by the PHA and only a subset of the higher level data is actually collected by HUD. For example, HUD collects only the gross component category totals (i.e. site, building exterior, building systems, common areas, and units) and selected major components for each development. **It is very important to note that HUD does not receive your underlying data, so they cannot recover it if you lose it.**

The GPNA Tool is just that – a tool. The tool's goal is to portray, as accurately as possible, the capital needs of a Housing Authority. If specific situations arise in the use of the tool as recommended in this User Guide that do not best represent the existing conditions, you should use your best judgment in using the tool in a way that does best reflect what is observed.

The purpose of this GPNA Tool User Guide is to provide the user with practical step-by-step instructions on how to use the tool, as well as other guidance on protocols for performing the GPNA. HUD also maintains resource documents and tools such as Frequently Asked Questions, archived webinars and webcasts, and status information

on its website hud.gov (search “Physical Needs Assessment” and “GPNA”) that are intended to be used together with this User Guide.

PHA Requirements

Only PHAs with public housing units in PIC need to complete GPNAs in accordance with this Public Housing rule. Other rulemaking administered by other HUD offices may impose requirements that a GPNA or similar assessment be performed on Section 8 inventory.

All PHAs with public housing units that include ACC units need to complete a GPNA that covers all of their projects/AMPS and units. The same procedures and requirements apply to all PHAs with public housing units—there are no different procedures for small PHAs. Of course, since smaller PHAs generally have a less complex inventory with a small number of units and projects/AMPS, there is commensurately less work required to complete the PNA .

The GPNA performed using the GPNA Tool will include all AMPs that include ACC units, including Mixed-Finance projects. A PHA may have a number of AMPs that have been reconfigured or abandoned and are recorded in PIC with no units applicable to them. If so, the PIC data file that HUD provides for import into the GPNA Tool will only include those AMPs with ACC units.

The GPNA forms the basis for the PHA's strategic planning and the establishment of goals and objectives contained in its PHA Plan. It provides the PHA with an estimate that quantifies the capital requirements for the entire portfolio of the PHA, which can and often will be in excess of current funding from HUD. Using these estimates, PHAs can prioritize their needs and look to leverage their capital funds with other funding, to better preserve their housing stock to meet the mission and goals of the PHA Plan.

It is not HUD's intent to use the GPNA for such project specific determinations. The PNA can be a planning tool for PHAs, and conducting a PNA will help PHAs make decisions on the future status of its properties. HUD's primary interest in collecting realistic summary level data is to be in a better position to assess national aggregate needs.

In Mixed-Finance projects that include both ACC units and non-ACC units, it is only the public housing (or ACC) units that need to be sampled for inspection in most cases. The non-ACC units may be tax credit units, or market rate units, and do not constitute part of the PHA's public housing inventory; therefore, they are not generally subject to inspection or inclusion in your capital needs assessments. While the non-ACC units may be included in the total unit count reflected in PIC, when the tool performs need/cost projection calculations, it will automatically prorate out those non-ACC units. When designing its assessment and sampling for a mixed finance project, the PHA needs to exercise judgment with regard to its real exposure to capital costs such as the treatment of "floating units" and the potential for non-ACC units to return to the inventory. These considerations help the GPNA serve as a genuine planning tool.

The proposed GPNA rule specifically and explicitly includes MTW agencies in the requirement. MTW agencies were specifically included because of HUD's support for the

importance of a GPNA for all agencies as a core activity and because of the value of the GPNA data from MTW agencies in providing HUD with a complete picture.

After the initial GPNA, PHAs will be required to repeat the full GPNA every 5 years. In between those full GPNAs, you will need to submit annual updates that report on capital improvements completed during the past year. Subsequent performances of the GPNA can and should use previous GPNAs as a basis.

Any PNA information older than 2 years (from the PHA's GPNA submission due date) cannot be used in the GPNA process (subject to final rulemaking). If your last PNA was completed within 2 years of your GPNA submission deadline and meets the requirements for the GPNA, then you can use that information for this initial submittal. You will have to input the information into the GPNA Tool. If your PNA information does not meet the requirements for the GPNA, then you cannot use the information. Having existing "take off" data, e.g., measurements and quantities of physical assets, from any previous PNA will save much work effort in creating your first GPNA.

You can use your own staff to perform the PNA if they collectively meet the qualifications as defined in the rule, including having at least one team member with 5 years' experience performing physical property inspections and cost estimating; demonstrated knowledge of applicable building standards and codes; demonstrated knowledge of energy efficiency practices; and a working knowledge of commonly used computer technology (MS Excel, Office, etc.). PHAs do need to be aware that if they are planning to use this GPNA to support future transactions such as financing, the terms of that transaction may require a third party to perform the GPNA. Some PHAs may also find it more objective to obtain a third party review of their inventory.

If you contract out the GPNA, there is a sample Statement of Work available in Appendix B. Please note that this document is not a HUD required form and may not address services that your PHA might want included. PHAs should review the sample carefully and make modifications that correspond to their desired scope of work and business terms.

If you have several people performing the assessment, key input sections of the tool including the cost libraries, inspection forms, and cost projections can be exported to Excel spreadsheets and worked on by others independently. The resulting modified spreadsheets can then be imported back into the tool to populate it with those inputs. However, only spreadsheets originally generated by the tool can be imported into the same copy of the tool. Excel sheets generated independently by the PHA or others will not be accepted by the tool. There is also a Client Server version of the GPNA Tool designed for use by larger PHAs that permits multiple persons to work on data entry of GPNA results at the same time. GPNA inspections and data entry can be performed by multiple people; there is not a requirement that one person carry out all aspects of the GPNA.

Only electronic submissions are permitted. The data are being consolidated into an aggregated database to help assess the total need for capital improvements in the nation's public housing portfolio. All GPNA submittals must be on the automated reporting data file that the GPNA Tool produces to comply with HUD's submission requirement.

You must perform a GPNA and include all ACC units, although you can exclude any units approved by HUD for demolition/disposition. If the demolition/disposition is proposed but not approved, a GPNA must be completed. Project GPNA data must be gathered and included in the GPNA until HUD has approved an application for demolition or disposition. A PHA may elect to record costs associated with removal, such as demolition costs and potential replacement costs, if there will be a long time interval between the time of approval and the actual removal of the units from inventory.

If the PHA determines it needs to undertake physical improvements in order to comply with Section 504 and related requirements, the cost of those physical improvements are included in the GPNA in the Accessibility category.

The GPNA is not an enforcement vehicle. Information entered into the GPNA on Section 504 needs is gathered for the purpose of estimating the total capital needs of the project(s). Those costs are reported in summary to HUD's data aggregator.

As provided in 24 CFR 966.4(j), the PHA must provide a written notice to the residents whose units will be inspected 2 days in advance of entry into the units. No notice is required to the residents whose units are not being inspected.

The PHA must make the GPNA available to the residents and the Resident Advisory Board (RAB) at the time it is submitted to HUD. The GPNA Tool produces appropriate summary reports. There is no requirement to "publish" the GPNA results. Laws vary by State as to whether such documents are freely available to the public, and PHAs need to comply with any applicable State or local ordinance in this regard.

Advanced Content: GPNA vs. RAD

The inclusion of Rental Assistance Demonstration (RAD) units into the GPNA depends on the publication of the Final Rule, the due date for your GPNA submission, and whether your inventory under a Commitment to Enter into a HAP (CHAP) ultimately convert to RAD. Also, the inventory in the GPNA tool must match the inventory in PIC at the time the GPNA data are submitted to HUD (PIC data requirements are discussed in detail under Phase 1: Pre-Assessment – Preparing for the GPNA). In general, inventory that has left public housing by being converted to RAD is not included in the GPNA. Inventory under a CHAP should be included in the GPNA with "0" needs going forward, as that inventory is expected to leave public housing. If some or all inventory under a CHAP does not convert to RAD (e.g., if necessary financing cannot be secured), then the PHA will need to revise the GPNA to account for inventory that did not convert to RAD.

HUD suggests that you work with your Field Office to balance RAD and GPNA requirements and, if applicable, to request an extension for submission of a revised GPNA.

The RAD program uses a different tool, known as a Physical Conditions Assessment (PCA). The GPNA Tool and the RAD PCA (RPCA) are not interchangeable. The RAD program covers both public housing and Project-based Section 8, and the RPCA is taken from the Mark-to-Market program that originated in the Multi-Family side of HUD. The GPNA Tool was not in approved form when RAD began. Although the programs use different tools, the inspection and analysis cover the same ground, and can be used to input into either Tool (assuming those performing the inspection and analysis meet the requirements of both programs). The RPCA for the RAD program requires substantial additional narrative and photographic documentation, and has a different approach to energy conservation measures.

If you are applying for conversion of public housing to Project-based Section 8 under the Rental Assistance Demonstration (RAD) program, you will need to use the RAD program's Physical Conditions Assessment (RPCA) Tool during the 6 months after receiving an invitation to enter into a Commitment to enter a HAP Agreement (CHAP). Currently, if you need to complete your GPNA prior to such time as the project/AMP converts to Section 8 under RAD, you will also need to include the proposed RAD units and building data in the GPNA format at the appropriate time, but for the proposed RAD units you may enter $0 as the Need—since the units will likely leave the public housing inventory in the near term. While the GPNA Tool and the PCA are not interchangeable, if those conducting the inspections and analysis meet the GPNA and RAD requirements, then PHAs can enter information based on the same inspection into both tools, which would save time and money.

Funding Options

The GPNA is an eligible expense under the Capital Fund. As such, PHAs can include the cost of the GPNA in any open, unobligated Capital Fund grant. No additional funding is provided over and above the Capital Fund grant.

The GPNA is an allowable expense under the Operating Fund/reserve.

GPNA Due Dates

Implementation and due dates for the GPNA will be established based on the PHA Plan due date when the Final Rule for Capital Fund Physical Needs Assessment at 24 CFR 905 is published and made effective. Specific due dates for specific PHAs cannot be established until the effective date of the final rule is established, but PHAs will have a minimum of 6 months' notice from the date of publication of the Final Rule.

After the initial period of transition following publication of the rule, GPNAs must be submitted to HUD 120 days prior to the end of each PHA's fiscal year end. The following table summarizes the due dates by fiscal year end.

Fiscal Year End	Due Date (pending publication of the Final Rule)
September 30	June 2
December 31	September 1
March 31	December 1
June 30	March 2

PHAs should then use the new GPNA in developing their PHA Plans.

Unless a PHA is severely affected by a natural disaster, extensions of the GPNA due date will not be allowed. If a PHA is affected by a natural disaster, the PHA may petition the HUD Field Office for an extension.

HUD anticipates that the vast majority of PHAs will understand the need at both the housing authority and HUD level for development of capital needs assessments, such as the GPNA. In extreme cases where a PHA is not cooperating with this requirement, the PHA faces a number of sanctions similar to those currently available to HUD under the Capital Fund. These sanctions could include, but are not limited to, issuance of a Corrective Action Order; reimbursement from non-Federal funds; limit, withhold, reduce or terminate assistance under the Capital Fund or Operating Fund; and debarment or suspension.

Help and Assistance

HUD is not offering a certification course for the GPNA. PHAs may contract with any qualified vendor to perform the GPNA with its qualified staff. Qualifications for performing a GPNA will be included in the final rule and will include requirements that at least one team member has at least 5 years' experience performing physical property inspections and cost estimating; demonstrated knowledge of applicable building standards and codes; demonstrated knowledge of energy efficiency practices; and a working knowledge of commonly used computer technology (MS Excel, Office, etc.).

You can view and download the GPNA tool and related material from the GPNA Web site: http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/capfund/gpnatool.

If you have questions regarding the GPNA, first check the Frequently Asked Questions and other resources available on the GPNA Web site. If you cannot find an answer to your question, contact the PHA's local HUD Field Office. PHAs can locate their local HUD Field Office at the following Web address:

http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/about/field_office.

Preparing for the GPNA

The PHA should review the proposed rules and start evaluating the requirements to assess whether or not this is something it wants to do in-house or contract out.

Here are some suggestions for additional preparation: Review the existing training videos and other resources on the GPNA Web site and download at least the prototype tool to get familiar with it. Install a blank GPNA Tool from the Web page and import a PIC data file into it so that you can verify that the PIC data are correct or initiate corrections in PIC (instructions for checking PIC data are included in Phase 1: Pre-Assessment – Preparing for the GPNA). Work with your Field Office if the PIC data are not accurate. There is a substantial amount of project/AMP level data gathering that is required for any GPNA process, including architectural take offs, that requires quantities, component lists, costs, age, and useful life of building components. This is also the time to begin thinking about potential property improvements or modifications that could be considered during the GPNA process. If a PHA does decide to engage a third-party GPNA provider, it may want to do some mock inspections to get ready for them. Begin thinking about the composition of sets of like kinds of properties and units as will be described later.

GPNA Components

The GPNA assesses four main Needs Components, which together provide an aggregate Capital Needs number.

These four Needs Components include:

- **Replacement needs**— Replacement needs refer to basic or standard Building and Site building-systems and components.
- **Sustainability needs**—Sustainability needs refer to only those improvements or alternative replacement components that replace non-green components with green/energy efficient components.
- **Marketability needs**— Marketability or livability needs are those capital improvements that add new functionality or which otherwise promote occupancy through current tenant retention or new tenant procurement.
- **Accessibility needs**—Accessibility needs are those improvements necessary for adding accessibility functionality or maintaining current accessibility functionality.

The GPNA tool includes a comprehensive list of measurable Building and Site building systems and component items based on component lists used by HUD, green physical condition assessments, Uniform Physical Condition Standards (UPCS), and other building industry standards. The GPNA also permits the user to add components which may not have been included on the pre-loaded list.

Component Unit Cost and Effective Useful Life (EUL) are applied to all Building/Site components as part the GPNA. Component unit costs are based on industry cost indices of to be chosen by the PHA, such as *R.S. Means* or *Marshall & Swift*.

The EUL is used as the basis for the replacement of components as they meet the end of their life cycles. The EUL is applicable to most components and is based on industry standards. Other outside sources, manufacturing specifications, and building standard specifications may be used as a basis for EUL, as well as EUL figures from national cost indices.

Every component line Item must contain a minimum of four pieces of information in your upload to HUD:

1. An Estimated Useful Life (EUL) in years *(Entered in the Cost Library)*
2. A cost per unit for replacement (and/or refurbishment), e.g., each, sq. foot, linear foot, etc. *(Entered in the Cost Library)*
3. A Remaining Useful Life (RUL) in years *(Entered on the Inspection Form)*
4. A “Takeoff” amount – the quantity of each Line Item *(Entered on the Inspection Form)*

Any other information added can serve as a vital tool to document existing conditions or pass on institutional knowledge, but it is not essential for the tool to work.

Best practice would be to consider components rather than assemblies; the GPNA Tool uses the information from each component to make its calculations. Individual components have different projected and actual life expectancies and related costs that would not be captured using an assembly model. As with the composition of sets, the results will only be as useful to the PHA as the accuracy of the life expectancy of the components.

Standards

Standards refer to established descriptions of assessment components, and facilitate the consistent review of GPNA findings. Assessment components are divided into five categories:

- Site
- Building exterior
- Building systems
- Common areas
- Units

These Standards help to define structure types, based on the defined types within the IMS-PIC building and unit module.

Protocols

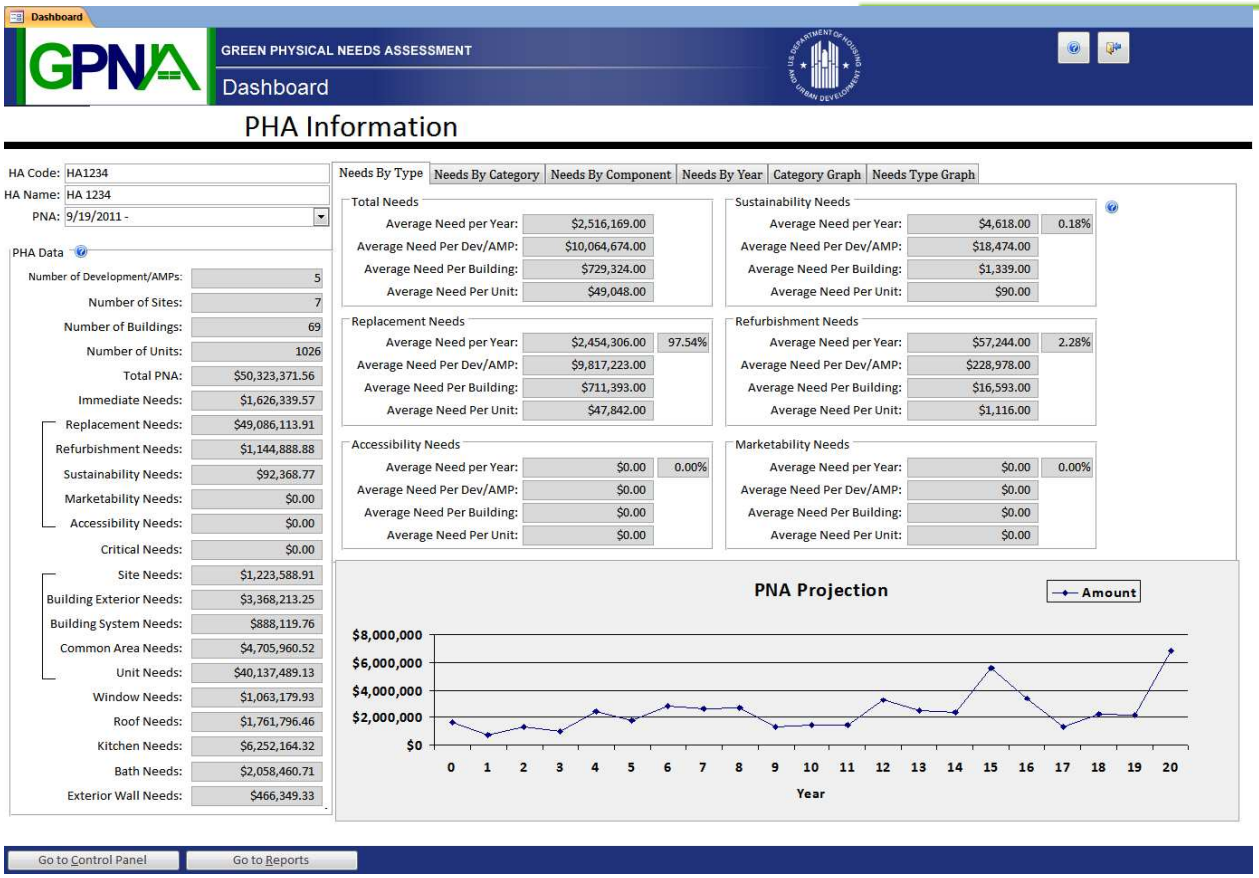
Protocols demonstrate the required or recommended procedural methods, or "how to" conduct the GPNA. These include protocols for determining sample sizes, utilizing qualified personnel, and performing the GPNA to help get the most information from collected data, as well as to promote consistency across all PHAs to ensure HUD aggregation provides for an accurate reflection of actual needs across all PHAs.

The performance of the GPNA proceeds in three phases:

- **Pre-Assessment** — Prepares you for the assessment, as well as collects and records existing development data, and utilizes architectural plan measurements and count data.
- **Assessment** — Assists you in identifying all building components, including quantities of each present component, establishes remaining useful life (RUL), and determines eligibility and cost of component refurbishment or replacement.
- **Post-Assessment**— Establishes industry standard parallels through data collection, review, and report production.

"The Nuts and Bolts of the GPNA Tool"

The primary functions of the GPNA tool can be accessed through the two main pages of the GPNA tool: the **Dashboard** and the **Control Panel**.



The Dashboard will allow you to view aggregated data as you input PHA information into the GPNA tool. Available functions allow you to view aggregated data on a PHA-wide level, as well as on development-wide level. The Dashboard also allows you to track the number of completed and remaining assessments (the Dashboard displays unit and building counts as they are assigned to sets).

Additionally, all PNA and Development/AMP Reports may be accessed and/or generated from the Dashboard.

No data entry or modification is done on the Dashboard.

The second main page of the GPNA tool is the Control Panel.

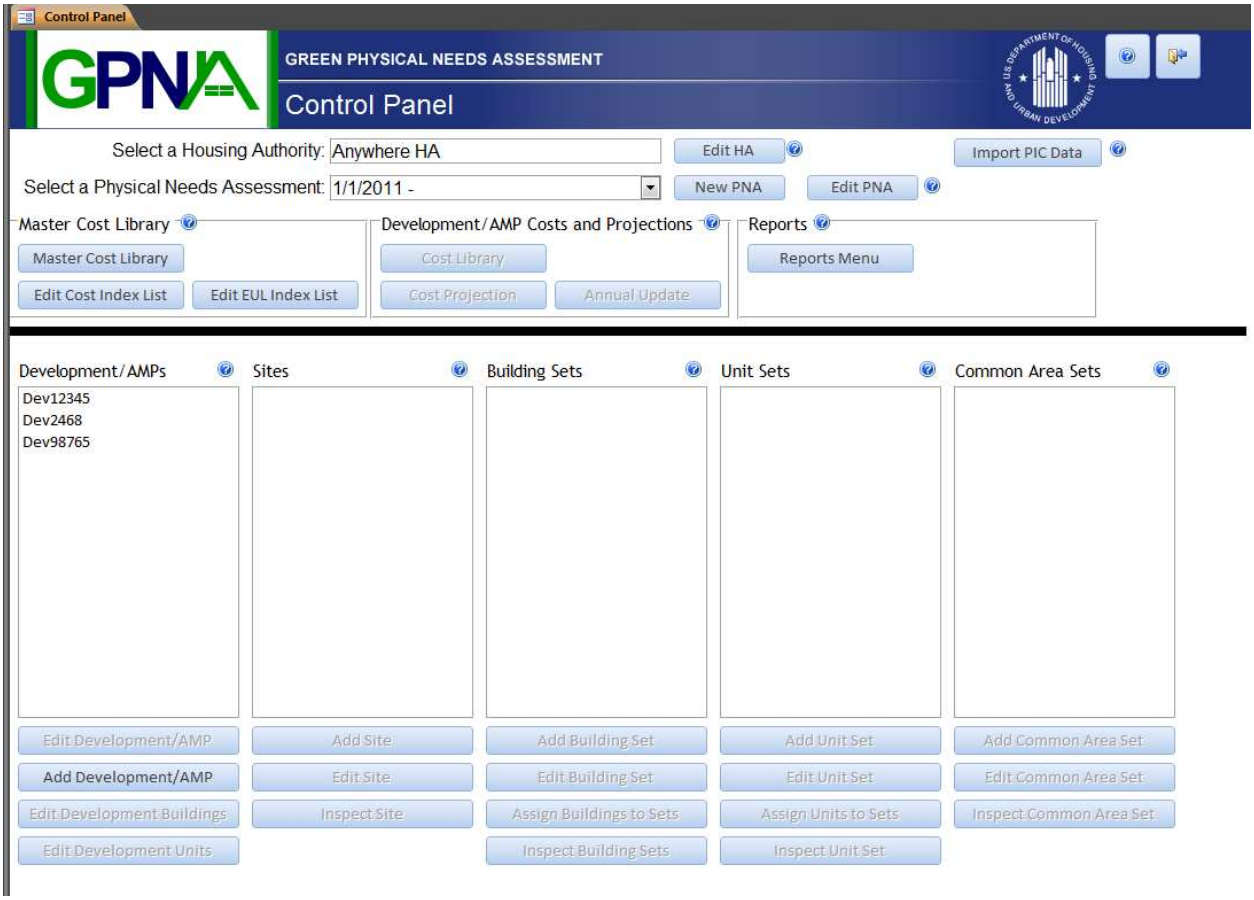
The Control Panel provides a central location for entering assessment data, and allows the user to select and manage PHA and GPNA information.

The top of the Control Panel screen contains input selections to initiate a GPNA and to select and manage PHA and GPNA information including import of the PIC inventory data into the blank GPNA tool. Until inventory data is entered into the tool, most functions cannot be performed.

The next section of the Control Panel contains Costing and Report controls, such as the Master Cost Library, Development/AMP Costs and Projections, and other Reports.

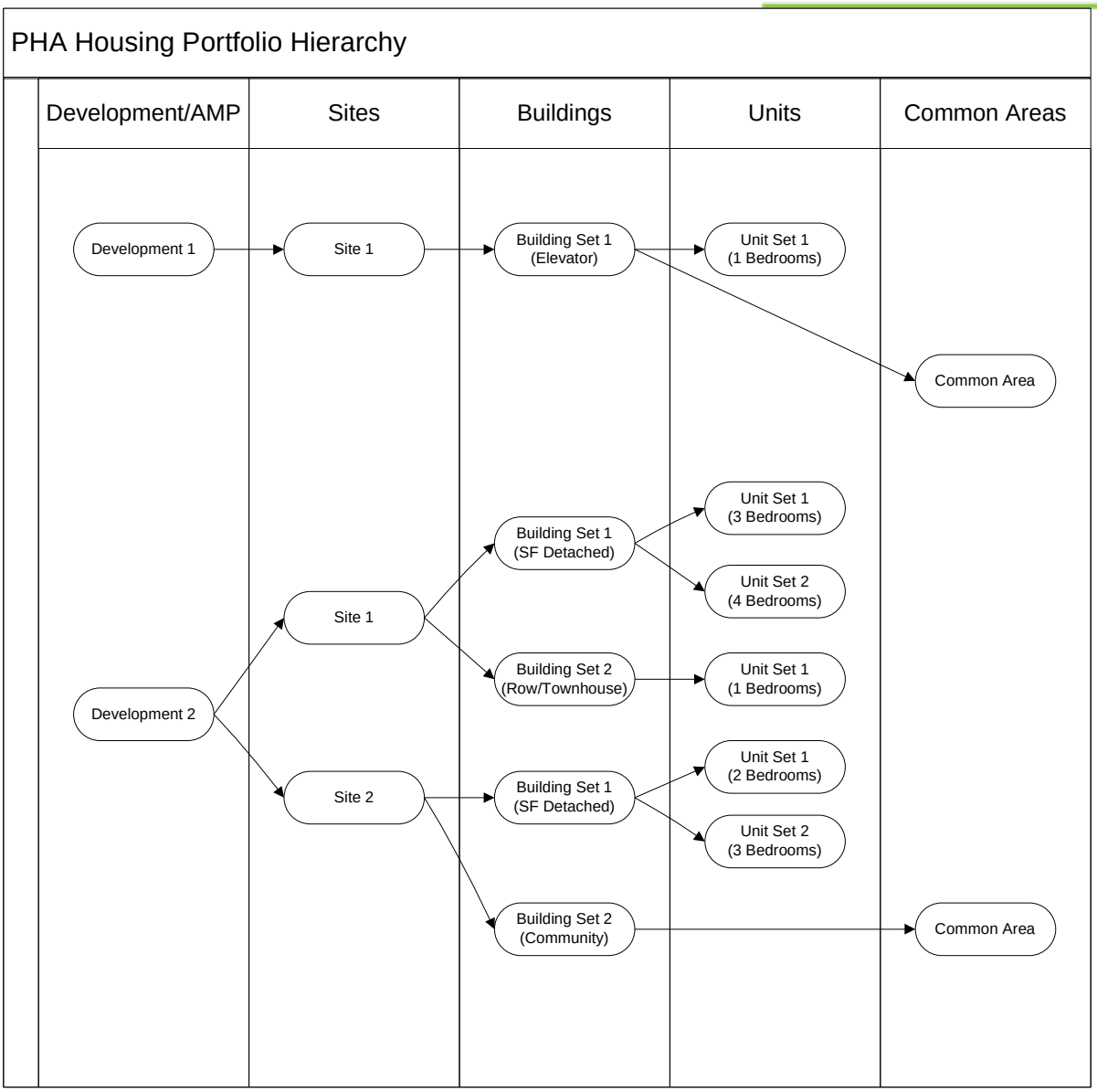
The Master Cost Library serves as the main repository for cost data. Development/AMP Costs and Projections are based on data entered inthe Master Cost Library, as well as Site, Building, Unit, and Common Area inspection data. Cost line-items and projections can be customized to meet Development/AMP needs from within this section.

Report controls within the Control Panel provide you with the ability to present cost projections data in various report formats.



The lower section of the Control Panel provides controls to enter, select, and manage PHA housing portfolio inspection/assessment information. This area is designed to reflect the hierarchy of a PHA's housing portfolio – portfolio organization is vital to the overall success of the GPNA process..

The GPNA tool has been designed to take into account PHA housing portfolio variability and to allow the PHA to organize PHA housing stock in a way which visually represents an established hierarchy that includes the entire inventory in sets that are logically consistent for the PHA. The hierarchy is as follows:



The sampling size protocol calls for 100% of Sites to be inspected, 20% of buildings within a building set, 10% of units within a unit set, and 100% of common areas. This hierarchy structure is helpful in creating an inspection design and effective sampling size plan.

As illustrated above, the hierarchy flow may be simple or more complex. For instance, in Development 1 in the Figure above, the hierarchy is simple. Development 1 is comprised of one Site, one Building Set, one Unit Set, and one Common Area Set. This could represent a single building on a land parcel with all units being essentially identical.

Conversely, Development 2 illustrates a more complex development hierarchy. Development 2 is depicted as consisting of two (2) Sites with two (2) building sets each.

Building Set 1 for Site 1 consists of two (2) Unit Sets, whereas Building Set 2 for Site 1 has only one (1) Unit Set. Similarly, Building Set 1 for Site 2 consists of two (2) unit sets, whereas Building Set 2 for Site 2 has no Unit Sets, but rather a Common Area set.

Other key features include:

- **Import/Export** – This function helps facilitate the data collection and data entry portion of the GPNA process. It allows for multiple users to work simultaneously on the GPNA and for easier transfer of data in a set format. Data sets eligible for export(Excel export) include the Master Cost Library, inspection forms, and the Cost Projection page.
- **Master Cost Library** – The Master Cost Library allows the user to enterand edit the Replacement Cost, Refurbishment Cost, Local Multiplier, Replacement EUL, and Refurbish EUL for all components. Through the Master Cost Library, the user can enter cost data for a master set of line items that are then copied to all Developments/AMPs within the current GPNA. The Master Cost Library can also be customized for each development without affecting the other developments.
- **Cost Projection** – This feature automatically creates projections as data is entered into the tool. These projections reflect anticipated replacement and refurbishment component costs over a set term of up to 20 years. These projections represent estimates of anticipated capital improvements, and not actual cost figures.
- **Unit Conversion Calculator** – This tool is intended for use when converting GPNA measurements and take-off data, including linear distance, area, energy, and/or liquid volume.

- **Help** - Look for and click on this icon  to access brief explanations and instructions about various GPNA tool functions.

Getting Started with the GPNA Tool

GPNA Tool Computer Operating System Requirements

The user's system should be a Microsoft operating system with Windows software Office 2000 or newer. The GPNA Tool is based on Microsoft Access and typically only works on a desktop or laptop computer. Although the tool is in Microsoft Access, the user is not required to have Access software to download the tool from HUD's Web page. The downloaded tool has integral software that installs on the user's computer that enables its use regardless of whether the user has Access. The file size of the downloaded tool is in the range of 70 MB and is generally too large to email even in a compressed or zipped file. PHAs using outside vendors need to be sure to obtain a disc or hard copy of the tool at the end of the contract for safekeeping. Subsequent required annual reports are produced from the tool. HUD will not have the capability to recreate a tool with the PHA's entered data as HUD only receives a limited extract of the data.

The GPNA tool is not MAC compatible. The tool was developed and designed for use in the Microsoft operating environment. There are Apple MAC products with dual operating systems that can run Microsoft Access database programs within an Apple MAC environment. If your MAC is so equipped, it should be able to run this software. At this time, HUD does not have a GPNA app available for mobile devices. You may be able to use a third-party app to work with the Excel data entry sheets included in the GPNA Tool on your smartphone or tablet.

Download the GPNA Tool from the HUD Website

http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/capfund/gpnatool

The tool is designed and intended for electronic use, not paper-based use. However, if it is useful, you may print out various pages including the inspection forms, cost libraries, and cost projections. These paper forms could be used as worksheets for later input into the tool or into Excel spreadsheets exported from the tool. The tool produces multiple printable reports on the reports menu page that are useful for sharing the results with others.

Advanced Content: Multiple Users and Multiple PHAs

Multiple Users: A PHA may choose to simplify the GPNA process by delegating various tasks to multiple staff. The standard version of the GPNA Tool is typically installed locally on a computer and only supports one user at a time. Multiple users can work on the GPNA, with users taking turns working in the actual GPNA Tool. In addition, multiple users can enter data in inspection and cost spreadsheets for import into the Tool (as discussed under Phase 1 and Phase 2).

Client-Database (Multiple Users with Full Access): HUD also developed a Client-Database version of the GPNA Tool that allows for a Multiple User configuration; these users will have access to a common full GPNA Tool. The Client-Database version consists of two parts – a Client Install Pack and a Database.

The Client-Database version is designed for large PHAs or PHAs that have many developments. It is not appropriate for smaller PHAs. It is available on our webpage but a password must be requested from PHAP-NA@HUD.GOV.

Multiple PHAs/Multiple Copies of the GPNA Tool: It is possible to install multiple copies of the GPNA Tool on one computer. For example, third-party assessors may have contracts with multiple PHAs, some entities manage multiple separately numbered PHAs, or, as mentioned in the Annual Update instructions below, PHAs may want to track inventory changes in a copy of the GPNA Tool to prepare for their next full GPNA.

To load additional copies of the GPNA Tool on to the same computer, you will need to re-name the existing tool subdirectory (the existing subdirectory is "Green PNA;" an example of a new name is the PHA code). Then you will have to move this subdirectory to another location (such as a new subdirectory) before you reinstall the GPNA Tool. To prevent mishaps, it is also advisable to rename the GPNA data file in the subdirectory so that it will have a different name from other GPNA data files.

Detailed instructions for installing multiple copies of the GPNA Tool are provided in a guidance document available on the HUD PNA Tool Website.

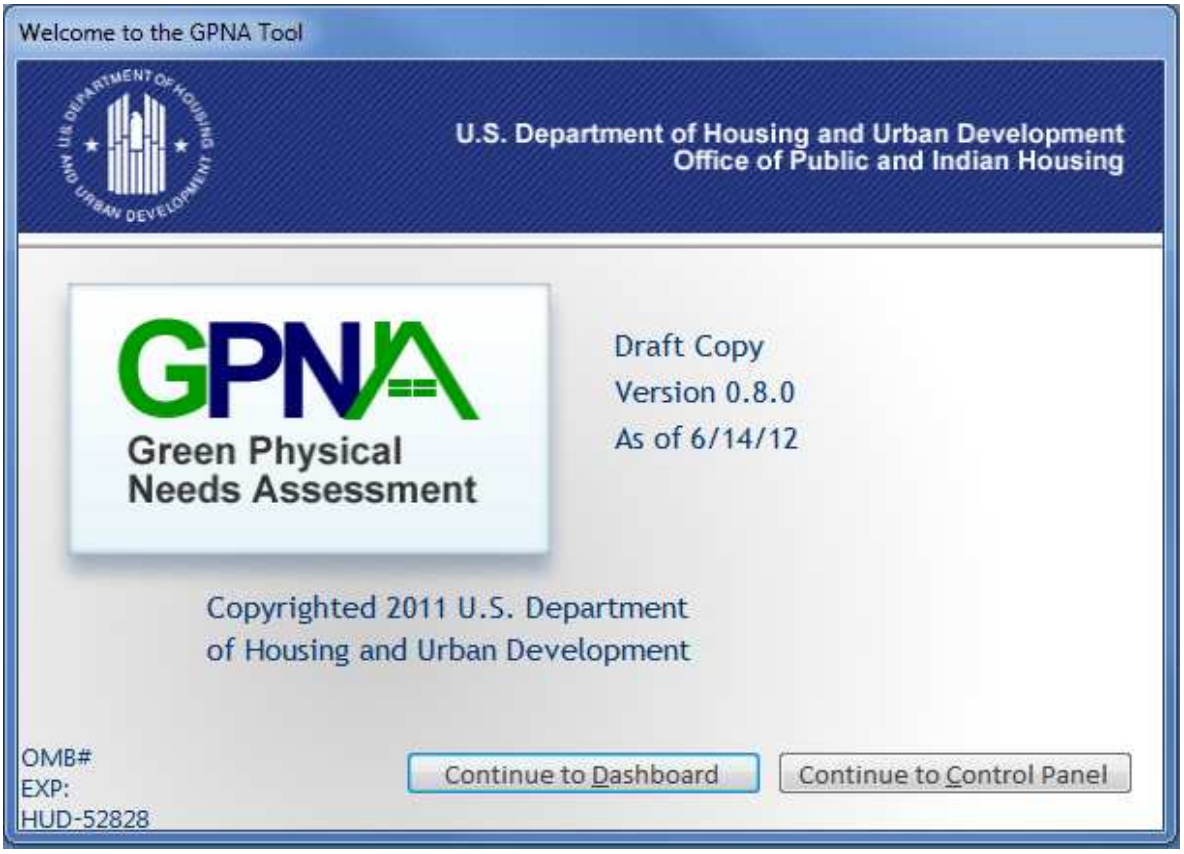
Backing up the GPNA Data

A PHA should always observe best practices in preserving agency data and backup data frequently, both onsite and offsite. Depending on the size of the PHA and the sophistication of its hardware systems, data on the server may be backed up daily on the same drive, or to a “cloud”. Given the potential for failure of hard drives, use of the “cloud” backup systems should be given serious consideration. For data on the server, the technician supporting the systems may be charged with backing up periodically off site, or onto media storage placed in a fireproof safe on site, or both. Of more concern are instances where the data are stored on individual staff laptops or desk computers that are not linked to a server. PHAs may wish to consider developing a protocol in those instances where a backup is made daily (e.g., onto a USB drive) during the time frame the GPNAs are being prepared, and then any time updates are made. Good practices include having more than one external storage device and rotating them and/or using a “cloud” backup system. The default location name of the file that contains all of the live GPNA data that need to be backed-up and protected is C:\\Green PNA\GreenPNAFull.accdr. This may differ in the case of vendors who follow the procedure to have multiple live GPNA Tools on one computer.

It is not possible to directly “cut and paste” from one tool to another although some key input sections such as the cost libraries, inspection forms, and cost projections can be exported to excel spreadsheets. The data in such an exported spreadsheet could then be copied and pasted into a blank excel spreadsheet for the same form exported from another tool and imported into it.

Launching and Navigating the GPNA Tool

Each time you launch the GPNA tool, you are given the option to navigate to either the Dashboard or the Control Panel by clicking the coordinating button.



The Dashboard

The Dashboard serves as the home page for the GPNA tool. The Dashboard self populates with data as the user makes inputs to the tool on the Control Panel. From the Dashboard, you can:

- Review PHA and Development/AMP information.
- Review projected PHA and Development/AMP needs data by Type, Category, Component, and Year.
- Access the Control Panel to enter or edit GPNA data.

PHA Information

PHA needs data for a specific GPNA can be reviewed by type, component, category, and year from within this section of the Dashboard.

To review PHA needs data, select a GPNA from the PNA drop-down menu.

Then click on any of the following six available tabs to review data:

- **Needs by Type** - Provides a cost breakdown of needs requirements by type, including Replacement, Accessibility, Sustainability, Refurbishment, and Marketability.
- **Needs by Category** - Provides a cost breakdown of needs requirements by category, including Site, Common Area, Unit, Building Exterior, and Building System.
- **Needs by Component** - Provides a cost breakdown of needs requirements by component, including Window, Roof, Exterior Wall, Kitchen, and Bath.
- **Needs by Year** - Provides a cost breakdown of all needs requirements by year for the first five years, and then in 5-year terms through year 20.
- **Category Graph** – Provides a visual breakdown of needs costs by category, including Site, Building Exterior, Building System, Common Area, and Unit.

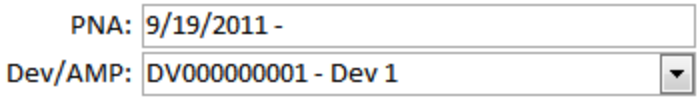
- **Needs Type Graph** – Provides a visual breakdown of needs costs by type, including Replacement, Refurbishment, Sustainability, Marketability, and Accessibility.

Development /AMP Information

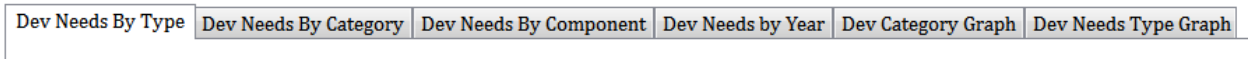
Development/AMP Needs Information

You can also review a Development/AMP's needs from the Development/AMP Information section of the lower Dashboard. As you update Development/AMP data in the Control Panel for a specific Development/AMP, the Development/AMP needs data on the Dashboard will automatically be updated.

To review Development/AMP needs data for a specific Development/AMP select the Development/AMP from the Development/AMP drop-down:



Then click on any of the following six tabs to review Development/AMP data:

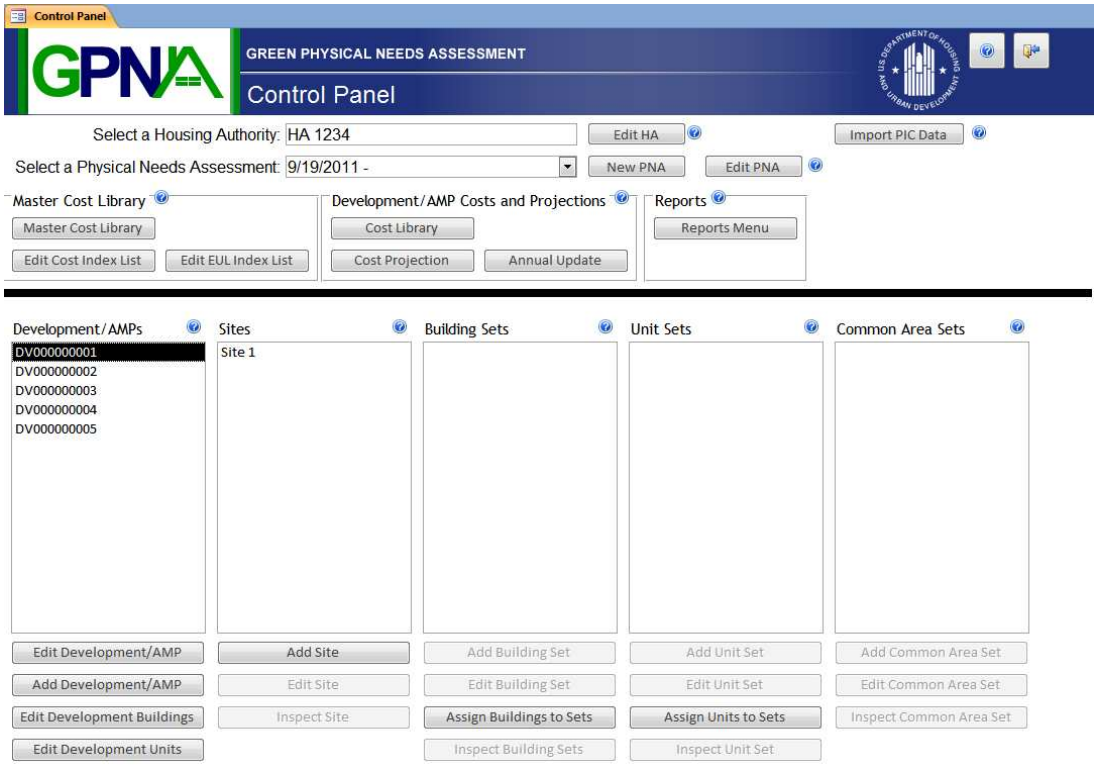


- **Dev Needs by Type** – Provides a cost breakdown of Development/AMP needs requirements by type, including Replacement, Accessibility, Sustainability, Refurbishment, and Marketability.
- **Dev Needs by Category** – Provides a cost breakdown of Development/AMP needs requirements by category, including Site, Common Area, Unit, Building Exterior, and Building System.
- **Dev Needs by Component** – Provides a cost breakdown of Development/AMP needs requirements by components, including Window, Rood, Exterior Wall, Kitchen, and Bath.
- **Dev Needs by Year –** Provides a cost breakdown of Development/AMP needs requirements by year for the immediate and first five years, and then in 5-year terms through year 20.
- **Dev Category Graph** – Provides a visual breakdown of Development/AMP needs costs by category, including Site, Building Exterior, Building System, Common Area, and Unit.
- **Dev Needs Type Graph –** Provides a visual breakdown of Development/AMP needs costs by type, including: Replacement, Refurbishment, Sustainability, Marketability, and Accessibility.

The Control Panel

The Control Panel is the input portal for all user entries and allows you to create, review, and edit PHA and GPNA data to:

- Add, assign, edit, and inspect Sites, Building Sets, Unit Sets, and Common Area Sets.
- Add and edit data related to the inspection of Development/AMPs, Buildings, Units, and Common Areas.
- Access the Cost Library.
- Produce cost projections.
- Perform annual updates.
- Access reports that provide detailed information on both the Development/AMP and GPNA.



Note: Exercise caution when making changes to selected Development/AMPs, Sites, Building Sets, Units, and or Common Area sets. Verify all previous selections to avoid confusing edits and updates between Category Needs inspections.

PHASE 1: Pre-Assessment – Preparing for the GPNA

Quick Steps

Phase 1 of the GPNA focuses on preparation and pre-assessment. The following overview presents the steps involved in preparing for a GPNA:

1) Identify qualified staff to perform the GPNA.
2) Request a PHA-specific PIC data extract by download from the Energy Performance Information Center (EPIC) PNA tab.
3) Verify IMS-PIC data and correct if necessary
4) Create a Master Cost Library
5) Organize PHA data and identify architectural take-offs, measurements, and counts. Input any preliminary data into the GPNA tool prior to the walk through.
6) Determine sample size and select units for the representative sample.
7) Notify residents of their units' inclusion in the GPNA process.

Please keep in mind that help is only a click away! Look for this icon  to access brief explanations and instructions about various GPNA tool functions.

Allocate Time to Perform the GPNA

The length of time required to perform the pre-assessment will vary depending on the size of the PHA and the extent and nature of its portfolio. Obviously, it will take longer to complete the pre-assessment for a scattered site property than it will for a single site property.

Further, the following should be noted: (1) the first GPNA completed by a PHA will be the most time consuming. After the first GPNA, the pre-assessment can be completed by updating the Cost Library and entering changes to the PHA's portfolio; and (2) the GPNA may be a more labor intensive process than most PHAs have experienced in developing their previous PNAs.

Identify Qualified Staff to Perform the GPNA

Each PHA must select a qualified assessor to ensure the success of the GPNA. The assessor may be an individual with all of the qualifications needed or an assembled

team that collectively demonstrates all of the qualifications. The qualifications are experiential in nature rather than credential driven. All qualified assessors, whether a third party or PHA staff, should have knowledge with five or more years of direct practical experience in the following areas:

- Building systems, health and safety conditions, and physical and structural conditions.
- Providing cost estimates for maintaining, rehabilitating, or improving deficiencies for all components.
- Estimating the remaining useful life of components based upon a physical inspection.
- Building standards and codes (i.e., federal, state, and local requirements).
- Environmental hazards.
- Accessibility requirements.
- Green principles - through training, certification, or experience such as through direct involvement in the implementation of an Energy Performance Contract (EPC).

Third-party assessors may include the following types of professionals who have the required qualifications:

- Registered architects and engineers.
- Certified home energy raters.
- Code inspectors.
- Construction managers.
- Certified building cost estimators.

If you choose to use PHA staff to conduct the GPNA, you may consider delegating specific tasks to various staff members based on their individual knowledge and skill level. This includes assigning data entry staff to enter GPNA data values into the tool during the PNA process.

If you choose to utilize a third party assessor, remember to start the procurement and selection process several months prior to your assessment completion target date. For your convenience, a sample RFP for 3rd Party Assessors is located in Appendix B.

Utilizing Staff Knowledge

A PHA staff's historical knowledge on property conditions contributes significantly to the thoroughness of a GPNA. PHAs should consider an interview process to capture data from knowledgeable staff prior to the walk-through survey.

A thorough interview should inquire about:

- The Development/AMP's historical repairs and replacements and their costs
- The level of preventive maintenance exercised

- Any pending repairs and improvements
- The frequency of repairs and replacements
- The ongoing systemic issues related to the Development/AMP's physical condition

PIC Data

The PIC data you base your final GPNA Tool Report on MUST match the AMP, building, and unit counts in HUD's PIC System at the time you submit the GPNA. **The submitted report will be rejected if these building and unit counts do not match exactly, so it is vital that you check and verify the counts before even starting the inspection process.** Note that the verification applies only to inventory information (number of ACC units, number of buildings etc). The unit occupancy status, tenant name etc. are not collected from PIC and are not relevant to the PIC data verification.

Checking PIC Data On-line

If you have access to the HUD Secure Systems, check PIC on-line to make sure that all the developments/AMPs are listed, and that the building and unit counts are correct. Do this as soon as possible to allow time to make changes in PIC before work on the GPNA starts. If the data is not correct, contact your HUD Field Office to have them make the changes. PIC data extracts for the GPNA Tool will be updated daily in EPIC, but you should provide a day or two after you know the PIC change was approved in the system to download a PIC data file reflecting current information. **It is important to wait until the PIC data is corrected before starting to enter data in the GPNA Tool.**

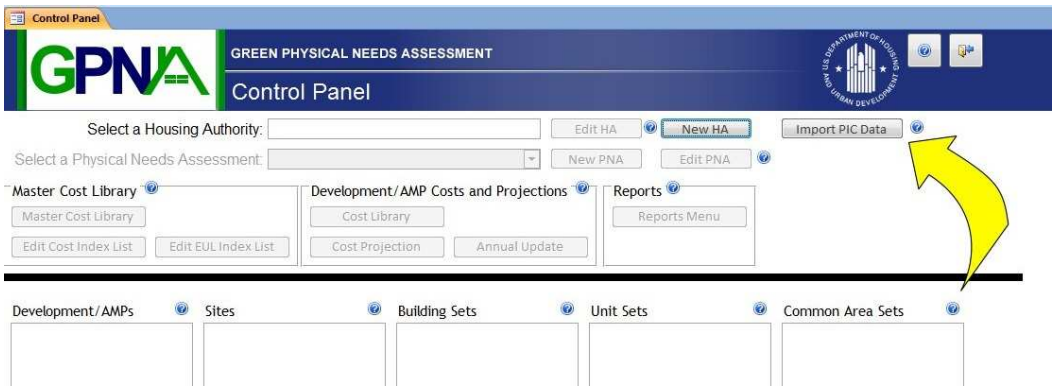
If you do not have access to the HUD Secure Systems, beginning in the summer of 2013 you may download a data set from the PNA page in EPIC or until then, send an e-mail to PHAPNA@hud.gov and request to have a PIC download file sent. Once you have imported the data set into the tool you can follow the instructions below to verify the PIC data in the GPNA Tool before entering PNA data into the Tool.

Note that the PNA data file that you receive from HUD is a machine readable document that you will not likely be capable of deciphering should you attempt to open and read it. Once the file is imported into the GPNA tool per the steps below, the tool software will translate to readable text placed in the correct fields for your review.

Importing the PIC Data

1. Click on the "Continue to Control Panel" button on the opening screen of the GPNA Tool.

2. Click on the "Import PIC Data" button located near the top right of the Control Panel screen.



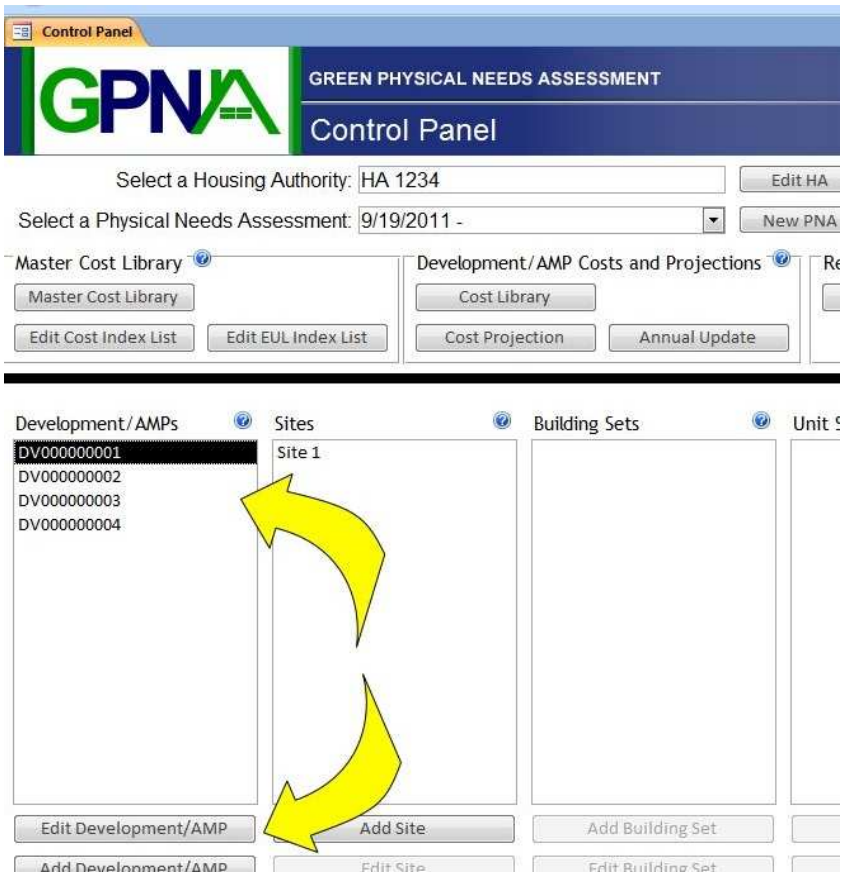
3. A “Select File to Upload” dialogue box will open. Navigate to the saved PIC data file that was received from HUD as a file attachment. The filename will be the PHA number, an underscore, the date the file was generated, and a period followed by the letters xml. For example … PA001_03182013.xml.

4. Click on the data file to select it, and then click on the “Open” button.
5. The tool will display a data summary page for the first AMP; select “save and close” at the bottom of the page.
6. The tool will display a message “the PHA data was loaded”; select “ok” and the AMP numbers will appear in the first column or the Control Panel under “Development/AMPs”.

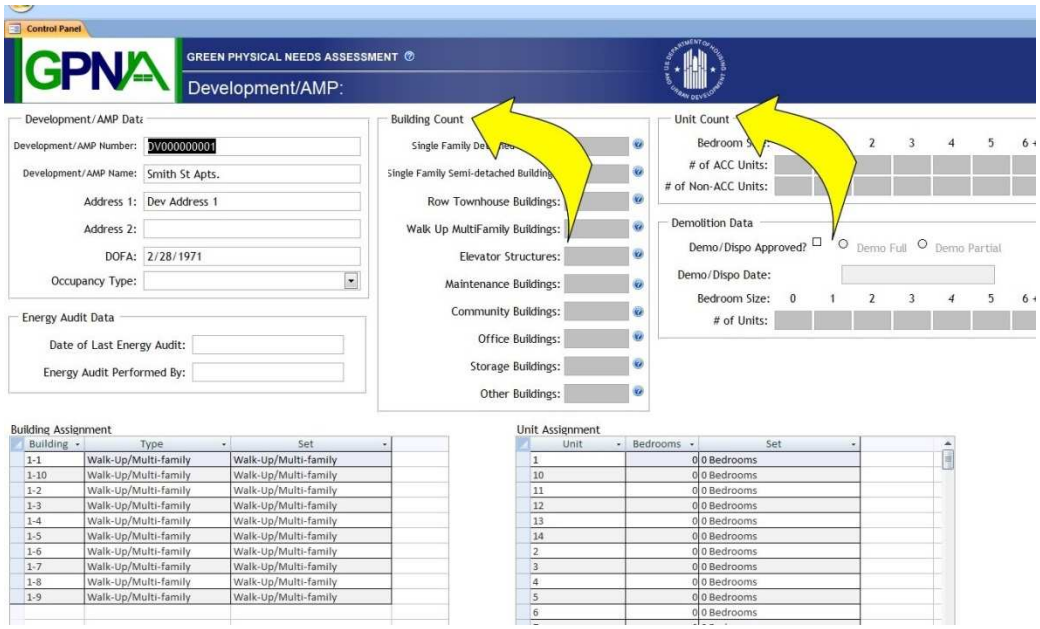
Verifying PIC Data in the GPNA Tool

After a successful PIC data download, the Development/AMPs section of the Control Panel should now be populated with all the Development/AMPs in the PHA’s inventory. To verify the data in the GPNA Tool:

1. Select the first Development/AMP on the list by double-clicking on its name. The Development/AMP summary screen will open.



2. Verify the Building Count and Unit Count information in the appropriate boxes against the information in the PHA's internal records. This page includes a gross count of ACC units and non-ACC units by number of bedrooms, count of buildings by building type, and a list of all buildings and units in this AMP.



3. Repeat Steps 1 and 2 for all Development/AMPs in the PHA's inventory.
4. Non-dwelling buildings are typically not pulled in from PIC. These buildings such as offices, maintenance, and community spaces are sometimes part of a Central Office Cost Center (COCC) and the expenses for maintaining them are not appropriate within the AMP. If you have these types of non-dwelling buildings and they are NOT part of COCC, they can be easily added if the user desires to account for their needs here using the "edit development building" function below.
5. Merged units are typically shown in the unit count from PIC and on the unit list as "non-ACC" units. If these units remain combined with another unit to function as a single unit, you may wish to delete the merged unit using the "edit development units" function below.

PIC Data Does Not Match PHA Records

If any of the Building Count and/or Unit Count information in the GPNA Tool does not correspond with the PHA's records, stop now!
You may make the necessary minor changes in the tool (see the two Advanced Content boxes below) or you may initiate a revision in PIC by communicating with the local HUD Field Office.

Note that any changes made in the GPNA Tool that do not agree with what is in PIC when the GPNA data is submitted to HUD will result in the finished GPNA Report being rejected. You may then need to request an updated PIC file and import it into a replacement blank tool. The tool does not allow loading

more than one PIC data set. It can take up to three weeks for changes made in PIC to appear in the PIC extract files used by the GPNA Tool.

In the meanwhile, information needed to complete the GPNA can be gathered, but any information entered in the GPNA Tool will need to be exported into a new blank GPNA tool or manually re-entered. Once the updated XML file is obtained, re-install a blank GPNA Tool and import the new XML file. Cost libraries and inspection input forms can be exported from the “old” tool and copied to a blank form from the new tool for import into the new tool. Do not start using the new GPNA Tool until after you verify the new PIC data in the GPNA Tool as described above.

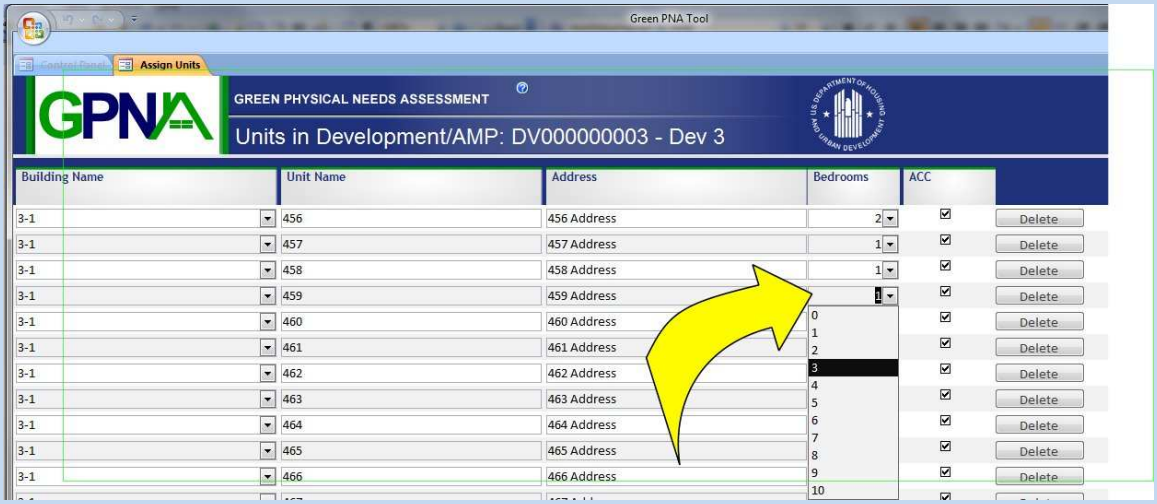
Advanced Content: Changing Building and/or Unit Inventory to Align with Current PIC Data

It is always preferred to start a GPNA with accurate, current PIC data, however there are circumstances where PIC data could change after the GPNA is started In these rare cases, you will need to change the inventory data in the GPNA Tool to match the changes in PIC; otherwise, your GPNA Report will not match PIC **at the time of submission** and your submission will be rejected. In the example below, four 1-bedroom units were converted to two 3-bedroom units in PIC, so the GPNA Tool inventory will need to be changed to match PIC.

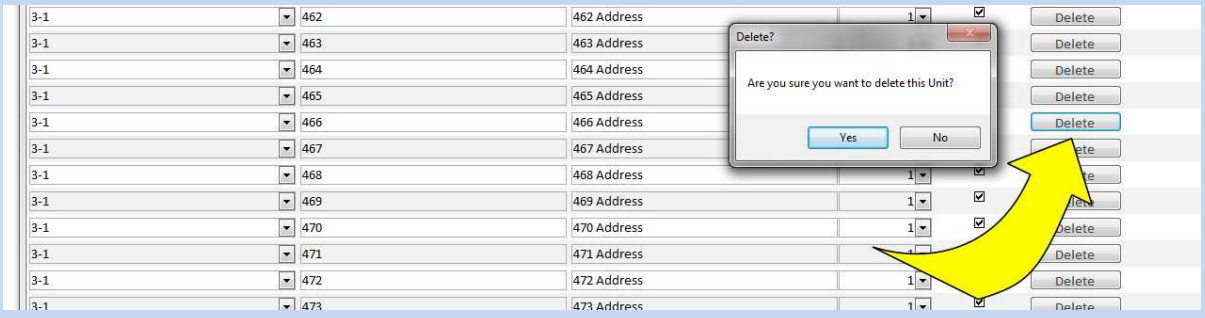
1. In the Control Panel | Development/AMPs box click once to highlight the specific Dev / AMP that contains the unit(s) that need to be adjusted. Then click the 'Edit Development Units' button below to access the screen where units can be edited and erased. *(Note that you may have to scroll down, as the button may be off the bottom of the default screen on some computers.)*

2. On the "Units in Development/AMP" screen, confirm that you are in the correct build-

ing (the Building Name column on the left), then find the Unit Names of the unit(s) that will have their Bedroom count number changed. In this example, using the drop down button in the Bedroom column, change the number from '1' to '3'. And then repeat it for the other converted unit.



3. On the "Units in Development/AMP" screen, find the Building Name and Unit Names of the unit(s) that no longer exist because they may have been merged, verify that there is no check in the ACC column box (indicating that the merged unit is recorded in PIC as a non-ACC unit),and click the 'Delete' button at the far right of its row. Note that any changes made on this screen are saved instantly and there is no 'Save' feature before leaving this screen. Similarly, **there is no "Undo" feature**, so if you make a mistake it is also saved instantly and you cannot "undo" it



Any changes made to Building and/or Unit counts made in the GPNA Tool that change them from what is in PIC at the time the GPNA Report is submitted, will cause the submitted GPNA Report to be rejected. So, only make changes in the GPNA Tool that conform to current PIC data. ONCE YOU DELETE INFORMATION IT CANNOT BE RETRIEVED.

. Use this same editing protocol for removing Non-ACC merged units or adding non-dwelling buildings that are not part of a COCC.

On the "Units in Development/AMP" screen, you can change 'Unit Name' and 'Address' for units

and it will not affect your submission of the GPNA Report. You can also delete Non-ACC units (those that have no checkmark in the ACC column box) without affecting validation.

Buildings may be added or deleted on the "edit development buildings" page. Note that each building has a drop down in the "type" column that enables choices to add Non-dwelling building types such as office, community room, maintenance, storage, and other.

Advanced Content: Changing Building and/or Unit Inventory to Align with Actual Inventory

It is always preferred to start a GPNA with accurate, current PIC data, however there maybe circumstances where a GPNA inspection is well underway and some of the inventory information is discover to be wrong. For example, two 1-bedroom units are actually discovered to be 2-bedroom units. Making changes in the tool is most appropriate for relatively minor additions/deletions.

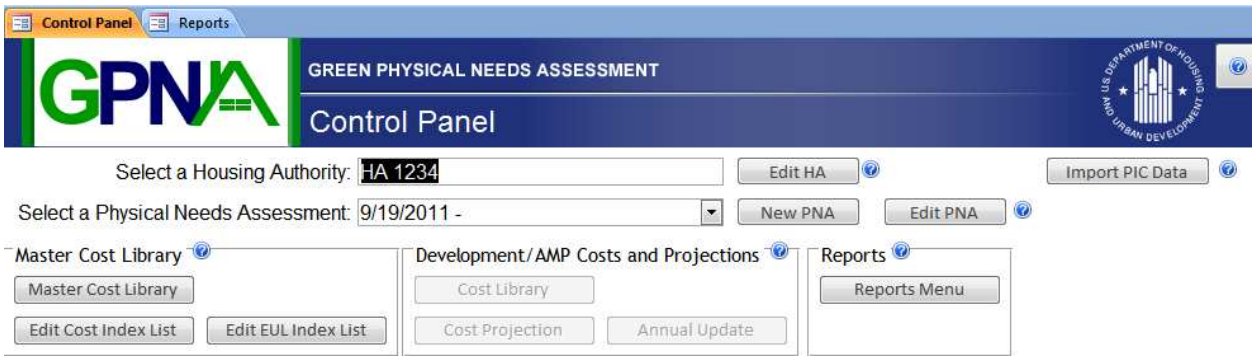
1. Follow Steps 1 and 2 from the "**Changing Building and/or Unit Inventory to align with current PIC data**" procedure (above) to change the bedroom counts on the "Units in Development/AMP" screen.

2. If you have access and authorization to PIC, log in and make the changes to reflect what is in your GPNA Tool. If you do not have this access, contact your local HUD Field Office and request that they make the changes. Be aware that this should be done ASAP to prevent missed submission deadlines.

Do not attempt to submit your GPNA Report until PIC reflects the Building and Unit Inventory that is in your GPNA Tool. After the counts in PIC are corrected in Step 2 and the change is confirmed, you can send in your final XML file submission as normal.

Edit a Housing Authority (HA)

Note: Use this function to edit the PHA location or Executive Director (ED) information ONLY. You must perform all other edits in PIC.



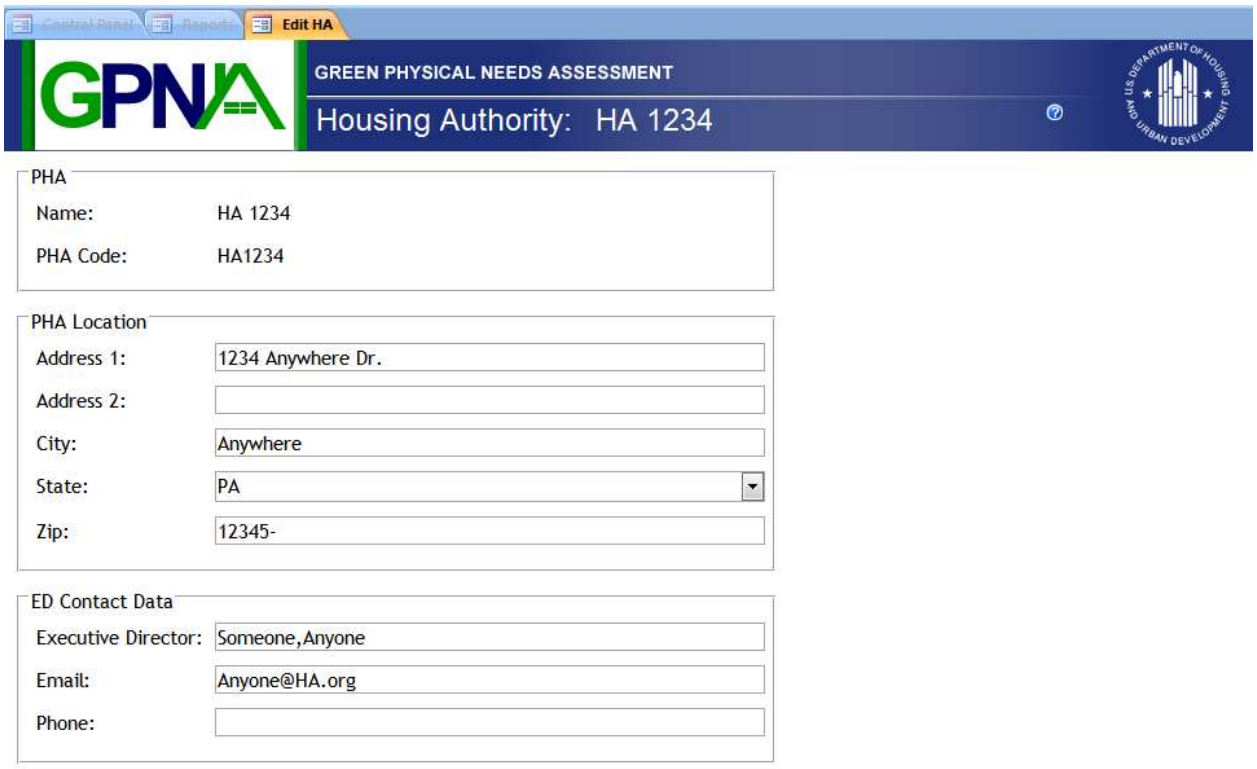
To edit a HA:

1) Start in the Control Panel,

2) Select the desired HA from the **Select a Housing Authority** field

Note: If your Housing Authority is not displayed here then you likely have the wrong version and will need to repeat the previous process to download the correct copy.

3) Click the Edit HA button - The Housing Authority screen appears.



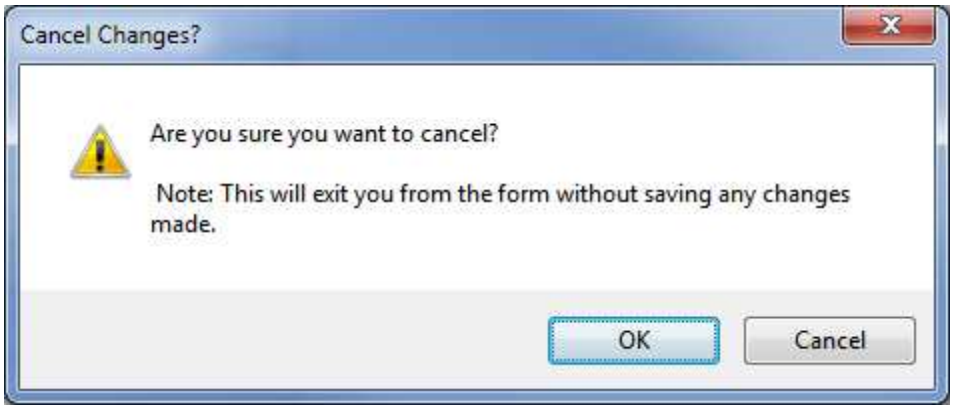
Edit the following fields, as appropriate:

- **PHA Location:** Address 1 and 2, City, State, and Zip
- **PHA ED Contact Data:** Executive Director, Email, and Phone

At this point, you may choose to Save or cancel edits made to this Housing Authority, or you may choose to delete this Housing Authority from your GPNA.

To Save Edits made to this HA, select on the Save button - You will be automatically redirected to the Control Panel.

To cancel edits made to this HA, select on the Cancel button – the following pop-up appears:



Select OK to confirm the Cancel and return to the Control Panel; select Cancel to return to the Edit HA screen and continue making edits.

To delete a HA:

From the Housing Authority screen,

1. Select the Delete button – the following pop-up appears:

2. Select Yes to confirm the Delete and return to the Control Panel.
3. Select No to cancel the Delete and return to the Edit HA screen.
4. AS WITH INVENTORY CHANGES, PHONE NUMBERS, ADDRESSES, OR EMAIL ADDRESSES WILL NOT BE AUTOMATICALLY CHANGED IN OTHER HUD SYSTEMS SUCH AS PIC AND CONTACT ADDRESS LISTS.

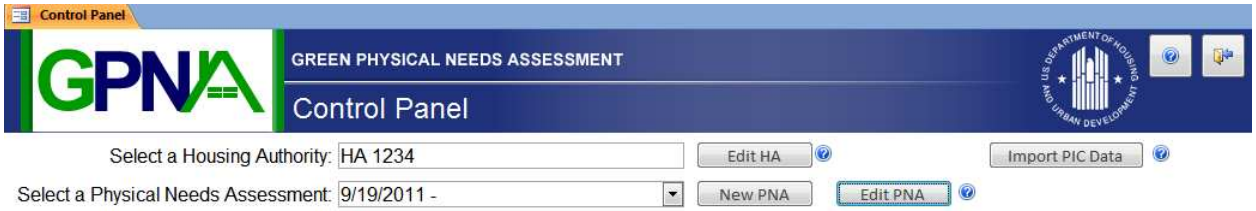
Note: THIS CANNOT BE UNDONE

Edit a GPNA

To edit a GPNA:

1) Start in the Control Panel,
2) Choose a GPNA assessment date from the **Select a Physical Needs Assessment** field

When you launch the tool for the first time, you will see that a PNA with the date of 1/1/2011 has been created. Edit this date so that it reflects the date of your first PNA.



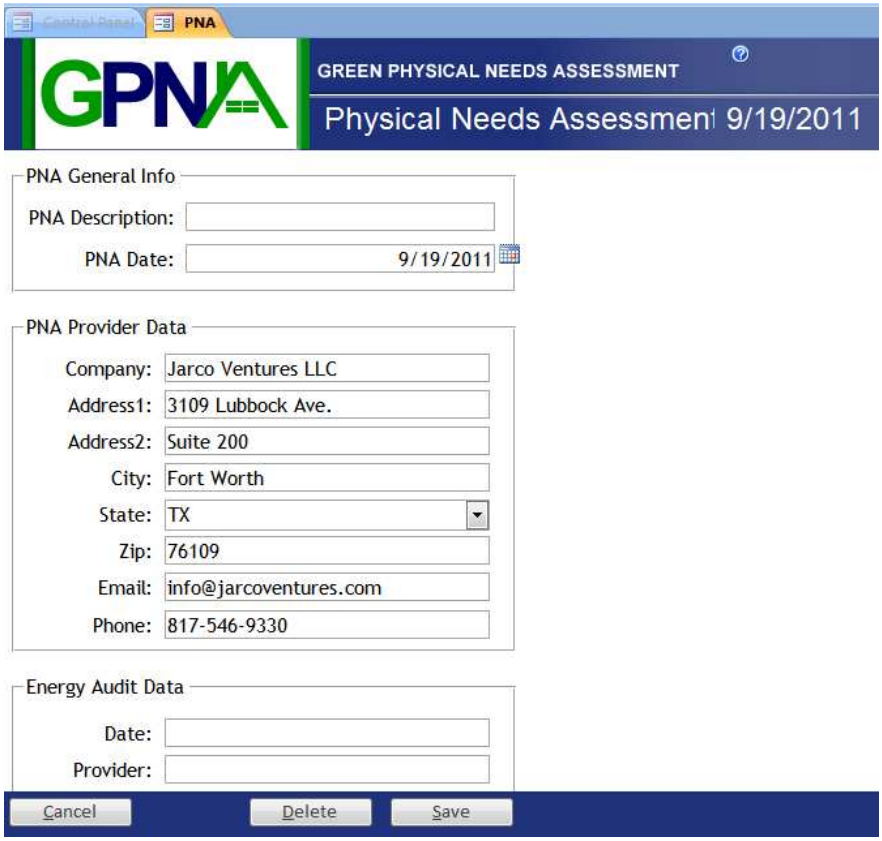
Note: To create additional GPNAs (for the same PHA), such as the second full GPNA, click the **New PNA** button. Remember that adding a new GPNA can copy data from the previous GPNA. Therefore, you should make sure your current GPNA is completed and saved before creating a new GPNA if you want to avoid duplicate data entries.

3) Click the **Edit PNA** button and the Physical Needs Assessment screen will appear.

Edit the following fields, as appropriate:

- **PNA General Info**: PNA Description and Date.
- **PNA Provider Data**: PNA provider name, street address, email, and phone.
- **Energy Audit Data**: Date and Provider name.
- **Copy PNA Data: allows the user to pull data such as the cost library and sets from previously entered PNA**s.

At this point, you may choose to Save or cancel edits made to this PNA, or you may



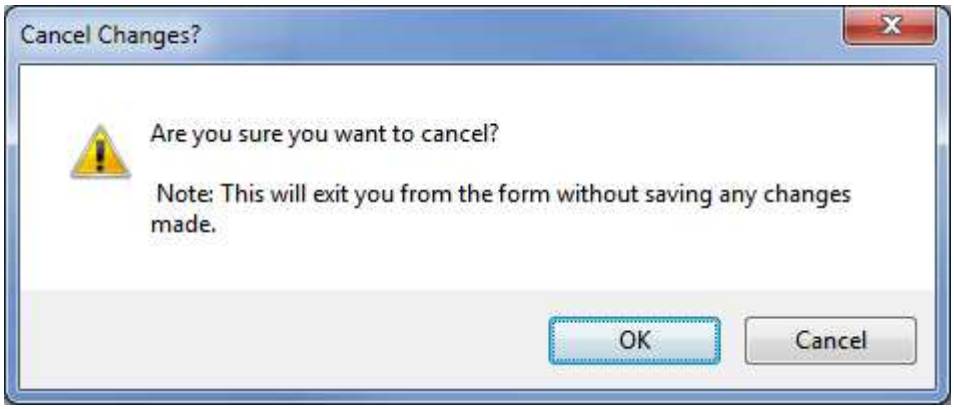
choose to delete this PNA from your GPNA.

To Save edits made to this PNA:

Click on the Save button – you will be automatically redirected to the Control Panel.

To Cancel edits made to this PNA:

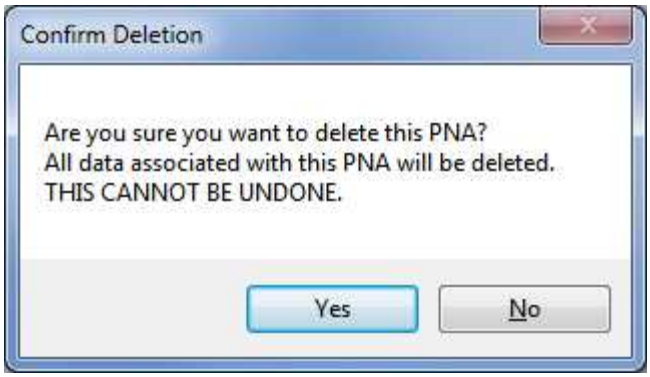
Click on the Cancel button – the following pop-up will appear:



Click OK to confirm the Cancel and return to the Control Panel (this will discard any changes you made to the PNA); click Cancel to return to the Edit PNA screen and continue editing this PNA.

To Delete this PNA:

Click on the Delete button – the following pop-up will appear:



Select Yes to confirm the Delete and return to the Control Panel; select No to cancel the Delete and return to the Edit PNA screen.

Note: Deleting a PNA CANNOT BE UNDONE.

Master Cost Library

The Master Cost Library allows the user to enter and edit the Replacement Cost, Refurbishment Cost, and Local Multiplier, replacement EUL, and refurbishment EUL for a GPNA. The replacement cost and EUL for each component line item applicable to the property are two of the four minimum entries required for each applicable line item in the GPNA. This page also allows the user to copy the cost data for the master set of line items which to all projects within the current GPNA. Once completed, the Master Cost Library saves the user from having to define separate cost libraries for each project. If a development's costs differ from the master, the development's costs can be edited in the Development/AMP Cost Library without affecting the Master or other developments.

Managing Master Cost Library Line Items

The Master Cost Library contains a list of line items that are commonly present in real property. The user may edit any master cost library line ("Edit" at the end of each line) to reflect local conditions. Note that only applicable lines in the cost library need to be populated with cost and EUL information. Changes made to the Master Cost Library do not affect previously created Development/AMPs; rather, changes to the Master Cost Library are reflected only in newly created Development/AMP cost libraries.

Cost Index

PHAs will select a standard, nationally recognized cost index such as *R.S. Means*[1] or *Marshall & Swift*. In selecting a cost index to use, certain factors should be considered, including flexibility, ease of use, and standardization. It is recommended that only one source be used in developing the Cost Index to facilitate more efficient updates. Most cost indices are seen as reliable and accurate, so using multiple cost indices poses no perceivable advantage.

The GPNA tool also allows you to input customized costs for any component item. The logic for allowing this action is that a PHA may have recent experience with costs for certain work, such as a recent purchase, bid, or recent contractor proposal. These sources would be considered more accurate for the purposes of evaluating the impact of these component costs. The custom cost amount will be entered directly on the Cost Library screen or on the Cost Library Detail screen, along with a brief description of the reason for the inclusion of a custom cost that can be entered on the Cost Library Detail screen, which is accessed by clicking on the underlined item (e.g., "Mail Boxes") on the Cost Library screen.

Note: Please be aware that any customization of cost indices will generate an "Anomalous Data report" whereby these customized cost indices will be brought to the attention of the PHA for review.

EUL Index

The EUL for a GPNA component refers to the period during which a building system or component is expected to be useful from the time it is new. EUL durations are a part of the GPNA cost and EUL component libraries in the GPNA tool. As with the Cost Index, the PHA will select a recognized EUL to input into the GPNA. Industry-recognized EULs include *R.S. Means*, *Whitestone Research*, and *McGraw-Hill Construction (Dodge)* indices. PHAs will use cost and EUL data from a nationally recognized index and they may customize it with local data.

The EUL is used within the GPNA tool as the basis for the replacement of components as they approach obsolescence. As part of the GPNA process, information on the installation date of components is collected, and the remaining EUL is based on this installation date. Setting the standard that all EUL within the library should reflect the building components, true EUL ensures that calculations are accurate. The GPNA allows for unique cases where the EUL requires adjustment for local circumstances. The GPNA tool allows for adjustments of EUL for refurbishment of a component. These unique cases are recorded in the variance report within the PHA's GPNA.

[1] R.S. Means Col, Inc., RS Means Repair & Remodeling Cost Data, 31st Annual Edition (Kingston, MA: Reed Construction Data, 2009).

Soft Cost and Markup Considerations

Soft costs (overhead, general conditions, profit) should be included by the PHA in submitted costs. Soft costs are included in estimates provided by industry specialists (e.g., R.S. Means). For most cost indices, estimations include materials, labor, equipment, general conditions, overhead, and profit. Other soft costs such as A&E, administrative fees, and expenses for relocation should not be included in a PHA's estimations in its GPNA.

General conditions, when applicable, for the building contractor may range from 0% to 10% of the total cost, including overhead and profit. For general or prime contractors, costs for general conditions may range from 5% to 15% of the total cost, including overhead and profit. Overhead and profit are, in most cases, the sum of the basic material costs plus 10% for profit, the basic labor costs plus total overhead and profit, and the basic equipment cost plus 10% for profit.

PHAs that do their own cost estimating through contractors or through in-house staff, should add markup costs consistent with the markup standards of their chosen cost index. PHAs should not include costs associated with PHA administrative, relocation, or design fees.

Inflation will not be assumed or projected since it is not projected for the Capital Fund grant. Since the GPNA will be updated every five years, costs will be adjusted at a five-year interval. The advantage of not showing inflation is to enable a better evaluation of fluctuations in needs throughout the 20 year period.

Component Category Filter

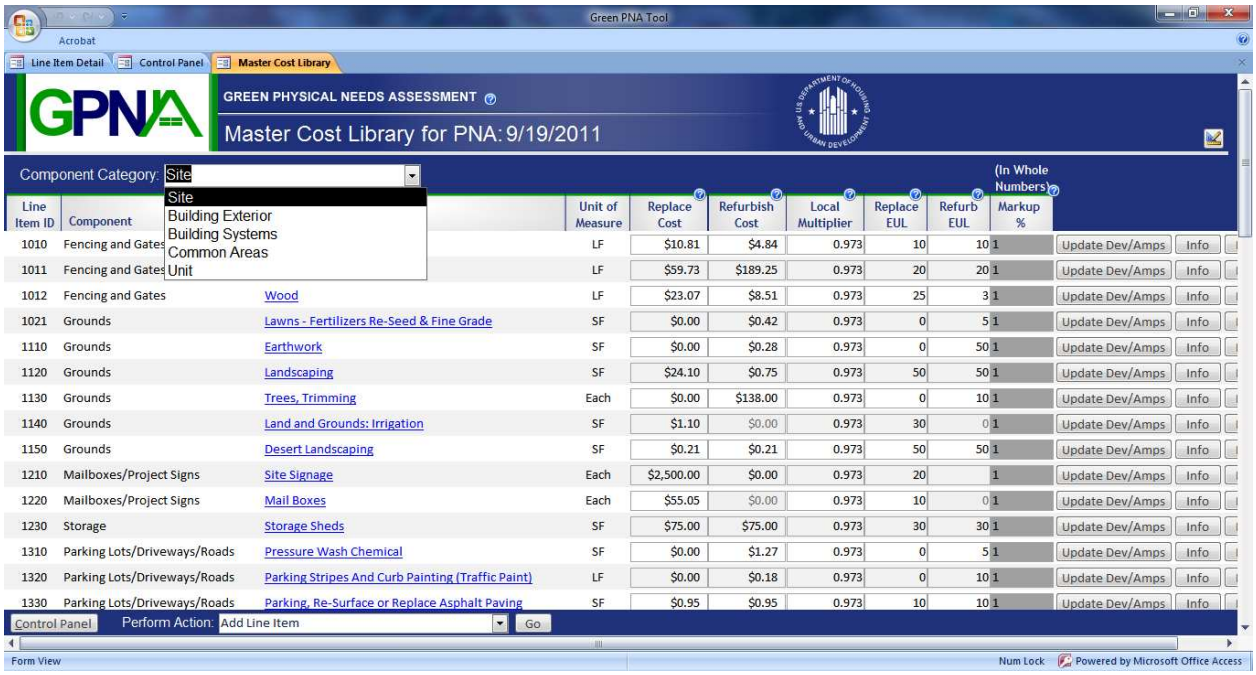
From the Cost Library screen, the Component Category filter is used to view line items by component type.

To filter line items by Component category:

1) Start in the Control Panel and select the desired Development/AMP from the **Development/AMPs** menu.

2) Click the **Cost Library** button in the Development/AMP "Costs and Projections" located in the center-top section of the Control Panel.

3) When the Cost Library screen opens, select a component from the **Component Category** drop-down menu, located at the top-left. The line items for the selected component will appear.



Edit the Master Cost Library

To edit the Master Cost Library:

1) From the Master Cost Library section of the Control Panel, click the Master Cost Library button.

The Master Cost Library for GPNA window will appear.

Line Item ID	Component	Line Item	Unit of Measure	Replace Cost	Refurbish Cost	Local Multiplier	Replace EUL	Refurb EUL	Markup %
1010	Fencing and Gates	Chain Link	LF	$10.81	$4.84	0.973	10	10	1
1011	Fencing and Gates	Wrought Iron	LF	$59.73	$189.25	0.973	20	20	1
1012	Fencing and Gates	Wood	LF	$23.07	$8.51	0.973	25	3	1
1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	SF	$0.00	$0.42	0.973	0	5	1
1110	Grounds	Earthwork	SF	$0.00	$0.28	0.973	0	50	1
1120	Grounds	Landscaping	SF	$24.10	$0.75	0.973	50	50	1
1130	Grounds	Trees, Trimming	Each	$0.00	$138.00	0.973	0	10	1
1140	Grounds	Land and Grounds: Irrigation	SF	$1.10	$0.00	0.973	30	0	1
1150	Grounds	Desert Landscaping	SF	$0.21	$0.21	0.973	50	50	1
1210	Mailboxes/Project Signs	Site Signage	Each	$2,500.00	$0.00	0.973	20		1
1220	Mailboxes/Project Signs	Mail Boxes	Each	$55.05	$0.00	0.973	10	0	1
1230	Storage	Storage Sheds	SF	$75.00	$75.00	0.973	30	30	1
1310	Parking Lots/Driveways/Roads	Pressure Wash Chemical	SF	$0.00	$1.27	0.973	0	5	1
1320	Parking Lots/Driveways/Roads	Parking Stripes And Curb Painting (Traffic Paint)	LF	$0.00	$0.18	0.973	0	10	1
1330	Parking Lots/Driveways/Roads	Parking, Re-Surface or Replace Asphalt Paving	SF	$0.95	$0.95	0.973	10	10	1

2) For each Line Item, you can update the following fields:

- **Replace Cost (REQUIRED FIELD FOR APPLICABLE COMPONENT LINES):** The estimated cost it takes to replace one unit of measure of a line item.
- **Refurbish Cost:** The estimated cost it takes to refurbish one unit of measure of a line item.
- **Local Multiplier:** The ratio of the average cost and the cost of that geograph-icarea as expressed in a cost index such as R.S. Means.
- **Replace EUL (REQUIRED FIELD FOR APPLICABLE COMPONENT LINES):** The estimated service life of a component item from the time it is new to the time it would typically be expected to require replacement.
- **Refurb EUL:** The estimated service life of an item if it were refurbished instead of replaced.

3) Click the **Update Dev/Amps** button after you update each line applicable item or you may perform this function for the entire spreadsheet at the conclusion of your entries from the dropdown at the bottom of the page.

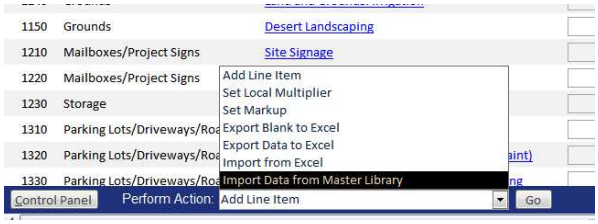
4) To view detailed information about each line item, click the **Info** button next to each line item.

Import Data from the Master Cost Library

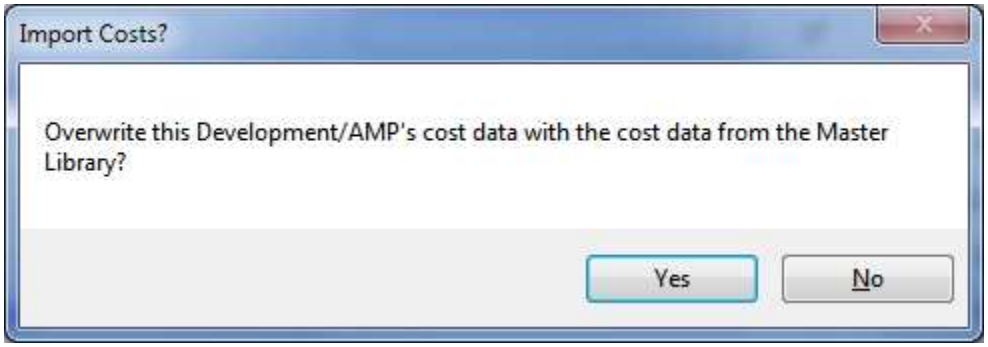
To replace a Cost Library with data imported from the Master Cost Library:

1) Click the **Cost Library** button from the Control Panel

2) Click the **Perform Action** drop-down menu at the bottom of the screen, then select **Import Data from Master Library** and click the **Go** button.



3) When the "**Import Costs?"** window appears, click **Yes** to overwrite this Development/AMPs cost data with the cost data from the Master Library, or click **No** to cancel. Note that will overwrite any customization that has been done in the Development/AMP's Cost Library.

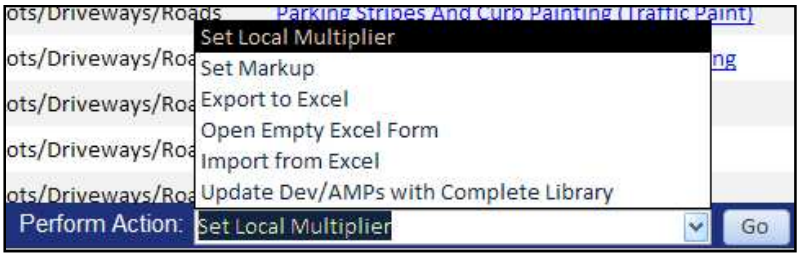


Set the Local Multiplier for the Master Cost Library

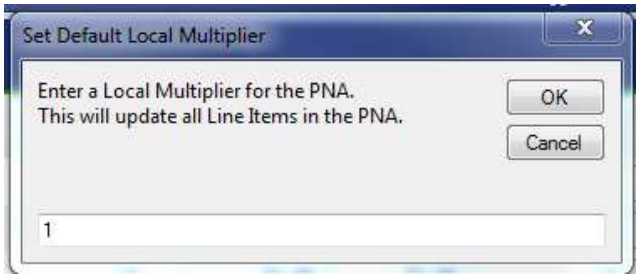
To set the local multiplier for the Master Cost Library:

1) Click the **Master Cost Library** button from the Control Panel to display the Master Cost Library for GPNA window.

2) Click the **Perform Action** drop-down menu at the bottom of the screen, select **Set Local Multiplier,** and click the **Go** button.



3) When the Set Default Local Multiplier window appears, enter the multiplier for the HA and click the **OK** button.

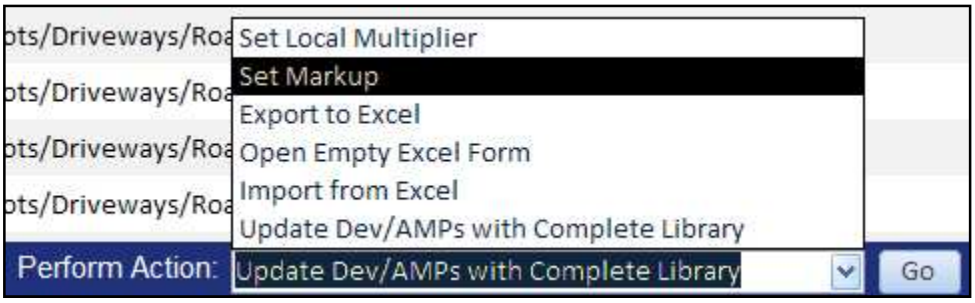


Set the Markup for the Master Cost Library

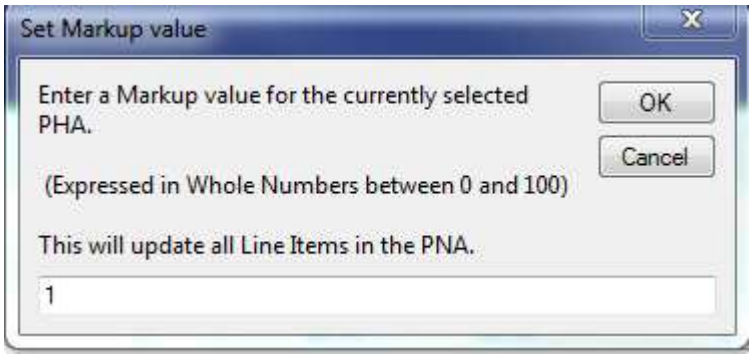
To set the markup for the Master Cost Library:

1) Click the **Master Cost Library** button from the Control Panel to display the Master Cost Library for the GPNA window.

2) Click the **Perform Action** drop-down menu at the bottom of the screen, then select **Set Markup** and click the **Go** button.



3) When the Set Markup Value window appears, enter the markup for the HA and click the **OK** button.

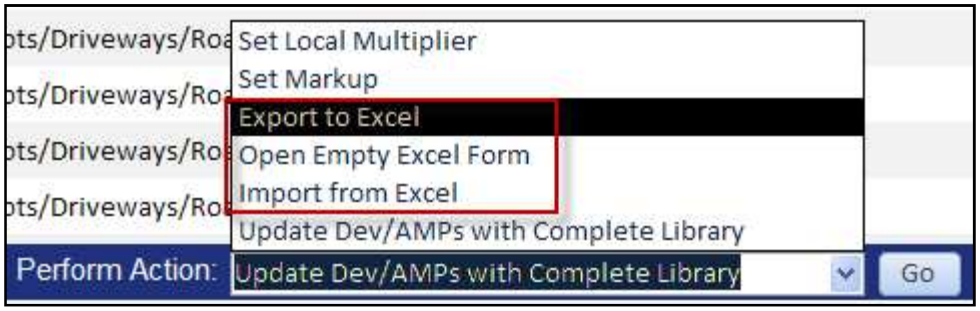


Export, Import, or Open an Empty Excel File for the Master Cost Library

Note: The major benefit of the export and import process is that it gives the end user the ability to have multiple staff working on the same GPNA, and the ability to move data from a previous GPNA into the tool in a compatible format.

To export, import, or open an empty Excel file for the Master Cost Library:

1) Click the **Master Cost Library** button from the Control Panel to display the Master Cost Library window
2) Click the **Perform Action** drop-down menu at the bottom of the screen, then select one of the following and click the **Go** button:
   - **Export to Excel:** Opens the Master Cost Library in an Excel spreadsheet.
   - **Open Empty Excel Form:** Opens the Master Cost Library….
   - **Import from Excel:** Allows you to import a Master Cost Library into the GPNA tool.



Organize Data

Use the procedures in this section to add, review, and edit pre-assessment data in the GPNA tool. Pre-assessment data includes baseline and take-off data which are then pre-populated into inspection forms to be used during the walkthrough assessment. These inspection forms are available for printing or for use on an electronic device. Inputting data during this phase of the GPNA may reduce the overall data entry burden for the GPNA.

This step of the pre-assessment data collection focuses on the physical characteristics of Sites, Buildings, and Units, and the measurements that will be recorded in the GPNA tool. Architectural data refers to the physical measurements of the specific property for which the GPNA is being conducted. Not all of this data will be readily available on documents held by PHAs. Portions of the required data will require field observations and measurements. Available PHA resources are as follows:

- **Blueprints or "to scale" drawings—**Documents such as elevations, mechanicals, etc. that include the site, dwelling and non-dwelling buildings, and units.
- **Site Maps—**Copies of development site maps.
- **504 Transition Plan—**Review the most up-to-date (annually updated) plan. The purpose of obtaining the plan is to record improvements remaining to be completed as reported by the PHA.
- **Energy Audit—**A copy of the PHA's most recent energy audit, including utility consumption data, recommended energy conservation measures (ECMs), and projected savings based on implementation of those measures.
- **Energy Performance Contract—**If the PHA has entered into an energy performance contract, the contract and its performance status should be reviewed to determine its impact on the implementation of energy conservation measures.
- **Green Data—**PHAs that have participated in various green programs should have documentation on green initiatives. Information on affected building systems and components may be identified.
- **Physical Needs Assessment—**A copy of the last assessment which provides historical data that should be used in formulating the currently scheduled GPNA.
- **UPCS Annual Inspection Reports—**Assist the GPNA team in identifying modernization items.
- **PHAS, PASS, and MASS Reports**
- **REAC Report(s)**
- **Resident Complaint Reports, Resident Meeting Reports, and Resident Questionnaires**
- **HUD Review Reports, Recommendations, Improvements, and Findings**
- **Major Current Bid Estimates—**For example, estimates for major structural work, boiler replacement, and playground replacement.
- **Maintenance Records and Maintenance Plan**

- **Environmental Reports—**Lead-based paint and asbestos testing and abatement reports. Review of these reports will help determine what testing and abatement that may be needed by the agency with results to be recorded in the GPNA tool.
- **Architect and Engineer Reports**
- **Capital Fund Performance and Evaluation (P&E) Reports—**These reports should cover at least the last five years.

It is very important to confirm that available architectural plans accurately represent buildings and units. For example, if two zero-bedroom units were combined in a previous modernization, this information should to be taken into account to provide accurate take-off data values.

Prior to the actual survey, you can use these documents and resources to record architectural take-offs, measurements, and component counts in the GPNA tool. In cases where data is unavailable, data fields can be left blank and completed during the onsite survey.

In some cases, actual quantities may not be available and will need to be estimated. Estimates are acceptable for those instances in which building plans are unavailable for pre-assessment architectural take-offs or for concealed conditions. However, this does not replace the need for physical take-off data during the assessment process. The best information available should be recorded in your GPNA tool.

Regarding concealed conditions, professional judgment in estimation is appropriate for such systems (e.g., plumbing pipes, electrical wiring, etc.). The presence and condition of the component can be determined based on interviews with on-site personnel (typically maintenance personnel).

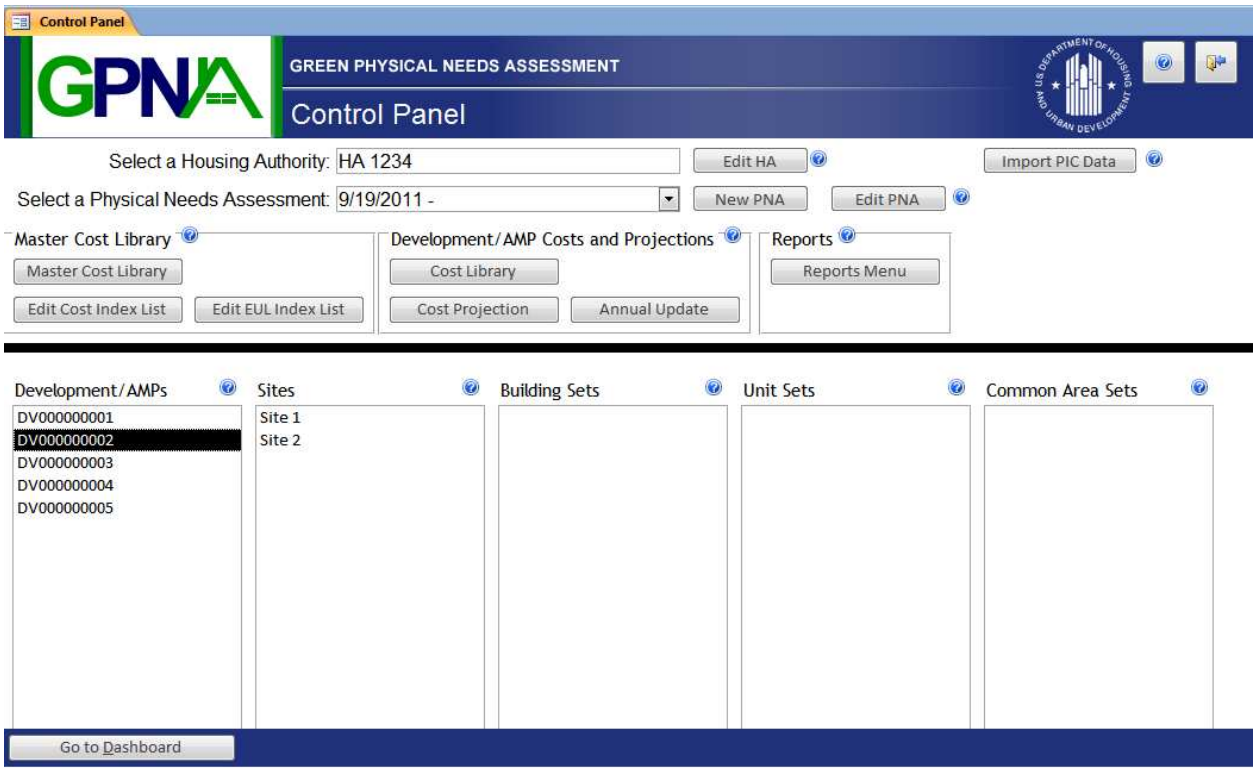
Add a Site

In some cases a development (AMP) may have multiple sites with multiple locations. PIC does not have this information in its system. Therefore, it may be necessary to break down the number of sites you have within each of your Development/AMP(s).

The New Site page is used to input pre-assessment data for a particular site within a Development/AMP. Site data includes the name and street location for a site along with optional square-footage breakdown of the different areas within a site, such as the parking area or outdoor recreation areas.

To add a Site to a Development/AMP:

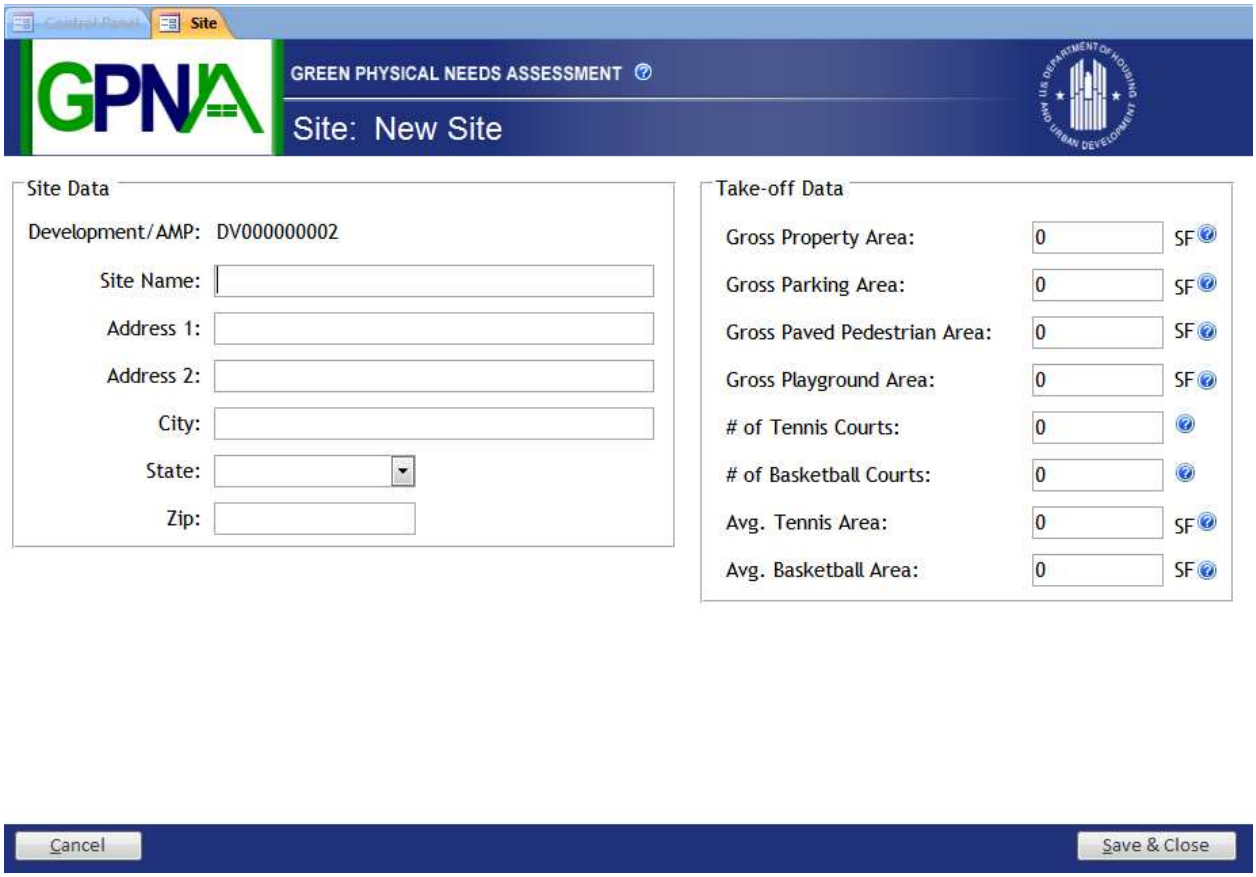
1) Start in the Control Panel.



2) Select the desired Development/AMP to which you want to add a Site from the Development/AMPs column
   - Click on the Add Site button – located below the Site column

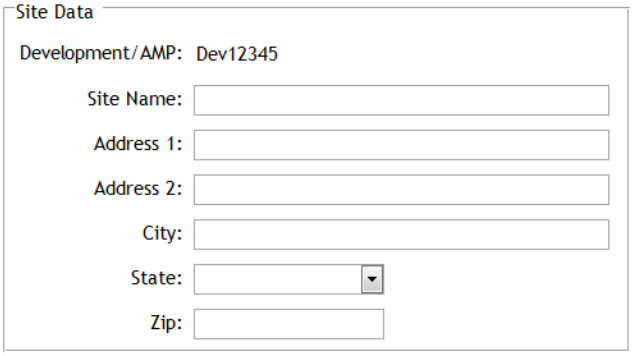
Note: You must first select a Development from the Development/AMPs column to enable the Add Site button.

The New Site screen appears.



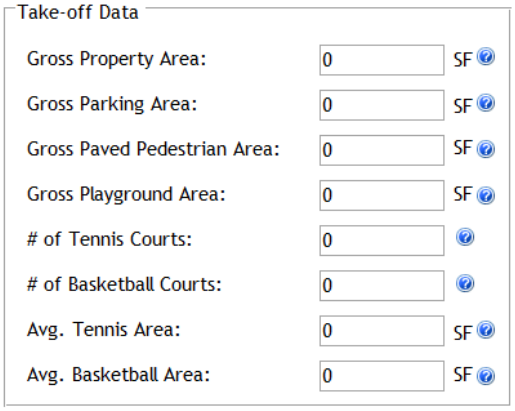
Complete the following Site Data fields:

- **Site Name** (Required)
- **Address**
- **City**
- **State**
- **Zip**



In the Take-off Data portion of the New Site screen, enter the pre-assessment take-off measurements as appropriate:

- **Gross Property Area:** Enter the area, in square feet, for all of the property area within the property's boundary.
- **Gross Parking Area:** Enter the area, in square feet, for all parking locations within the property's boundary.
- **Gross Paved Pedestrian Area:** Enter the total area, in square feet, for all paved walkways and patios.



- **Gross Playground Area:** Enter the total area, in square feet, of the playground surfacing within the property's boundary.
- **# of Tennis Courts:** Enter the number of tennis courts within the property's boundary.
- **# of Basketball Courts:** Enter the number of basketball courts within the property's boundary.
- **Avg. Tennis Area:** Enter the average square footage of the tennis courts within the property's boundary.
- **Avg. Basketball Area:** Enter the average square footage of the basketball courts within the property's boundary.

THESE QUANTITY ENTRIES ARE OPTIONAL. IF THEY ARE ENTERED SOME OF THE VALUES CAN BE AUTOMATICALLY PULLED INTO INSPECTION FORMS FOR THE SITE. IF THIS FUNCTION IS NOT USED, THESE QUANTITIES WILL NEED TO BE MANUALLY ENTERED ON INSPECTION FORMS. USING THIS QUANTITY LIST IS A GOOD WAY TO STORE BASIC PROPERTY INFORMATION.

Click the **Save & Close** button.

The new Site USING THE NAME THE USER HAS ASSIGNED TO IT ABOVE appears under the Site column in the Control Panel.

Add a Building Set

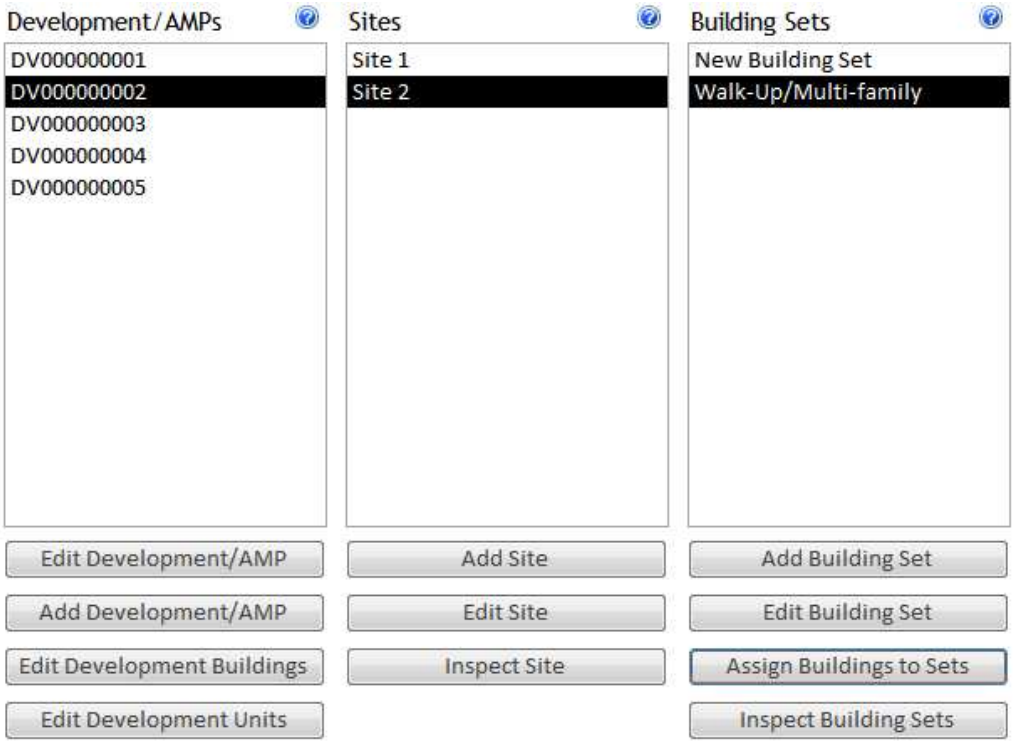
A Building Set is a collection of buildings belonging to a single Site which share characteristics, such as footprint, area, perimeter, height, and stories. All the buildings associated with a particular site must be assigned to a set(s). Some sites will have all identical buildings that may constitute a single set; other sites may have several dif-

ferent kinds of buildings that may constitute separate sets.The New Building Set screen is used to input pre-assessment data for a particular set of buildings within a Site. Every building must belong to a Building Set for the program to function correctly.

To add a Building Set to a Site:

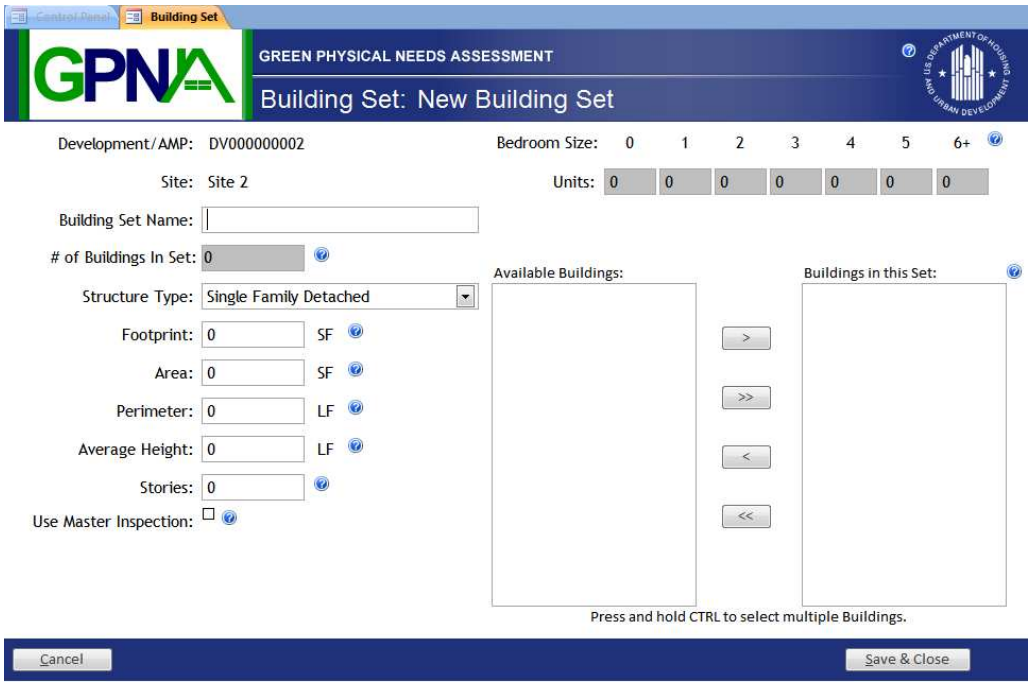
1) Start in the Control Panel.

2) Select the desired Development/AMP from the **Development/AMPs** column.
3) Select the desired Site from the **Sites** column
4) Click the **Add Building Set** button under the **Building Sets** column.



Note: You must first select a Site from the Sites column to enable the Add Building Set button

The New Building Set screen appears.



Building Set Name - enter a name for this New Building Set (REQUIRED).

Structure Type - Select a structure type from the drop-down menu. Each selection of a structure type will display any buildings of that type that are in this AMP in the "Available Buildings" space on the page

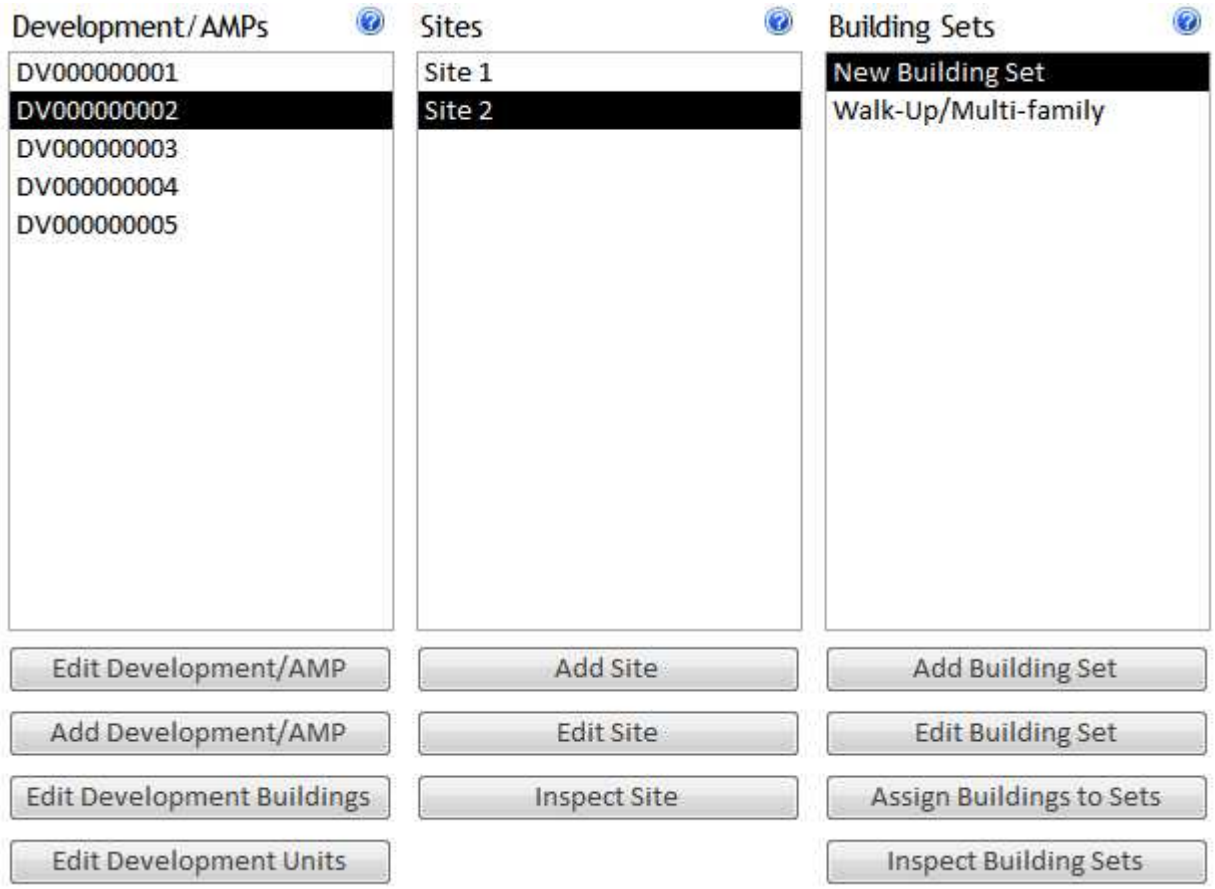
Footprint, **Area**, **Perimeter**, **Average Height**, **Stories** - Enter the square footage and length information for the buildings in this New Building Set. As with the site setup, this information is optional but will enable some efficiency of entry at the inspection stage and is a good place to store this basic property data.

Available Buildings - Assign any available buildings to this set using the arrows to move selected buildings between the **Available Buildings** and **Buildings in this Set** columns. Unassigned buildings that match the structure type appear in the Available Buildings column.

The exception is the Non-Dwelling Structure type. If this is selected, both list boxes will be disabled and the number of buildings in the Building Set will need to be entered manually.

Click the **Save & Close** button.

5) You will be automatically redirected to the Control Panel screen and the new Building Set will appear in the Building Sets column displaying the name that you assigned to it.



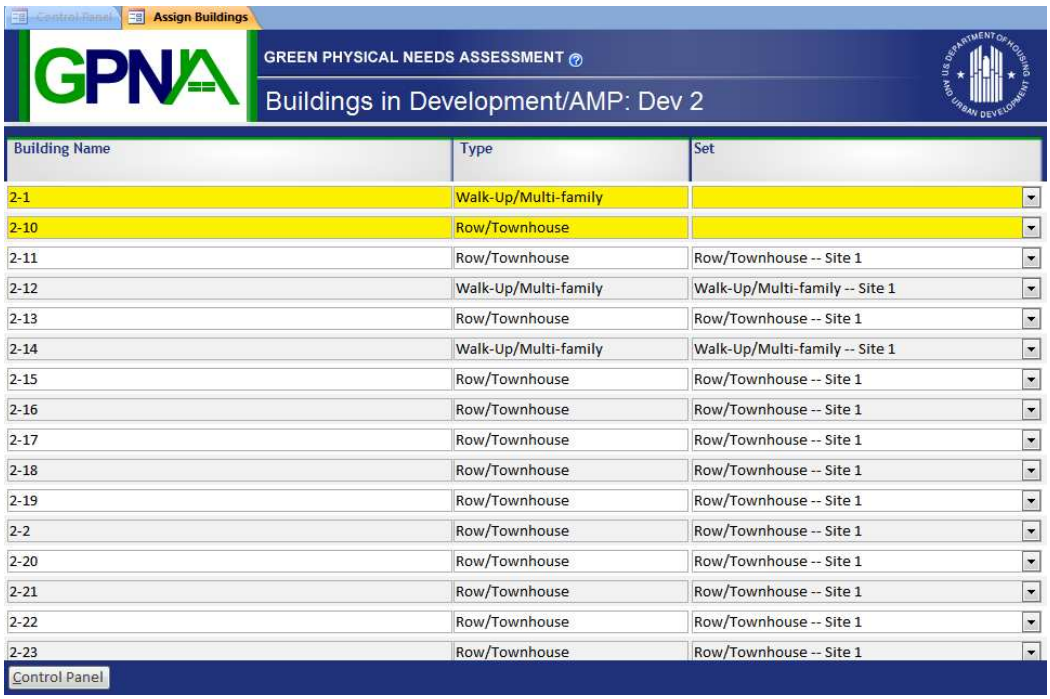
6) Click the **Assign Buildings to Sets** button under the Building Sets column of the Control Panel.

Note: It is not necessary to select a Building Set from the Building Sets column to enable the Assign Building to Sets button

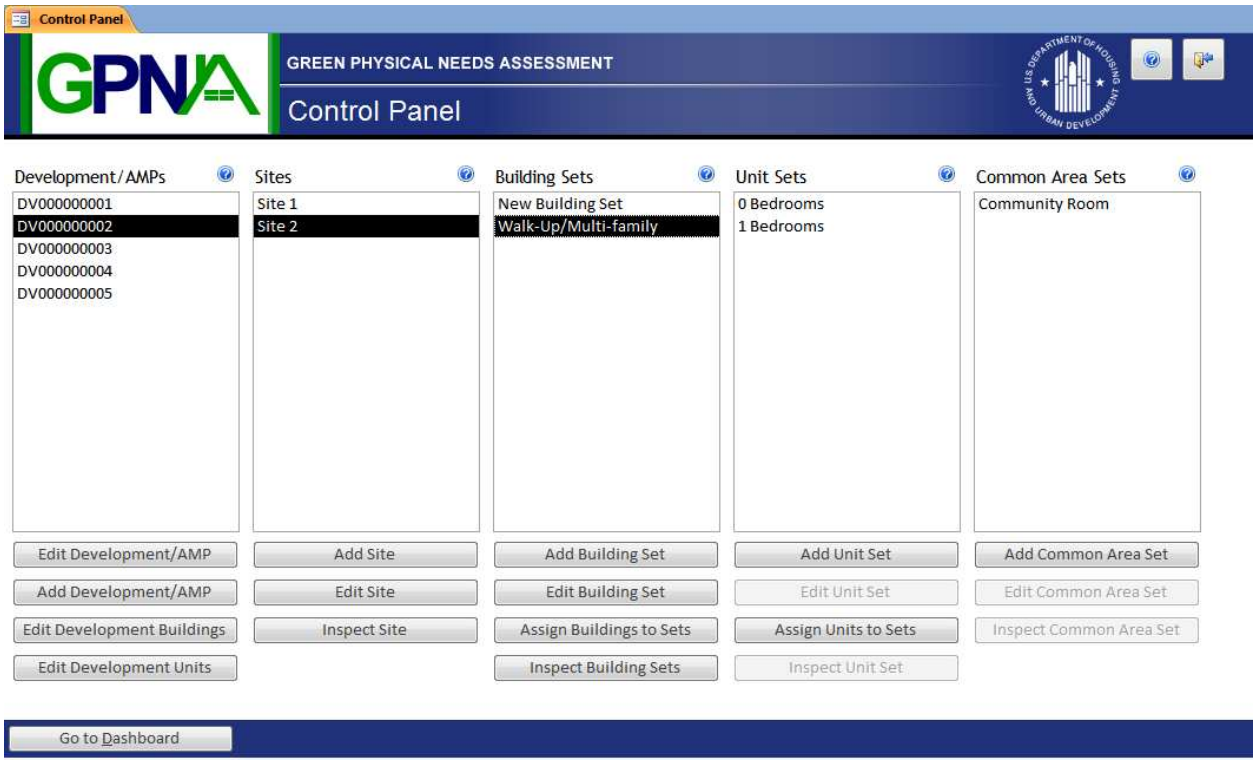
The Buildings in Development/AMP screen appears.

This screen provides a broader view of all buildings in the Development/AMP. The Assign Buildings to Sets screen is most useful in helping you find buildings you may have overlooked during the Building Set creation process earlier in this procedure. Unassigned buildings are highlighted in yellow.

7) Assign any unassigned buildings highlighted in yellow to building sets by selecting the appropriate building set from the Set drop-down menu.



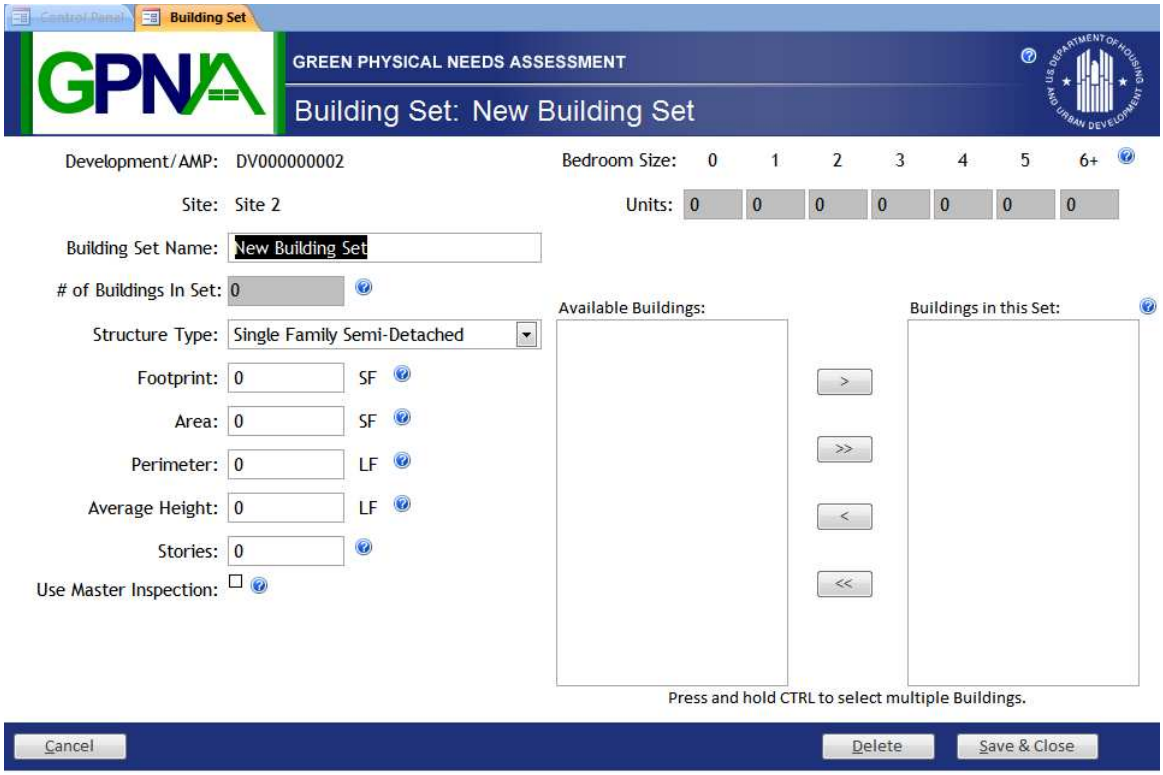
8) Click on the **Control Panel** button when you are finished to return to the Control Panel and continue editing building sets.



To Edit building Sets,

Select your New Building Set from the Building Sets column and click on the **Edit Building Set** button.

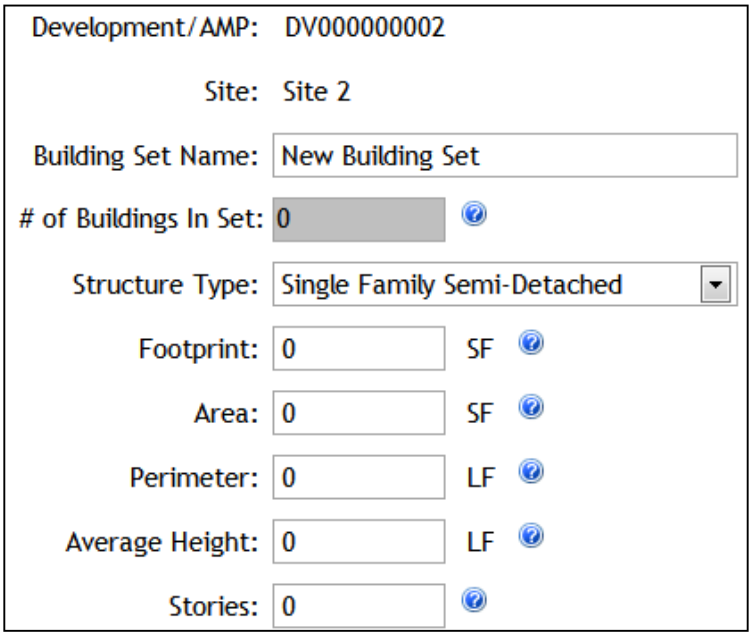
The Edit Building Set screen appears:



You may notice some fields have been pre-populated with data based on selections made in step 10 of this instruction set, including Number of Buildings in Set, number of Units, and Buildings in this Set.

Take time to review Building Set data and make any necessary changes to the selected Building Set's Footprint, Area, Perimeter, Average Height, and Stories.

Once you have finished making changes to this Building Set, Select on the **Save & Close** button to return to the Control Panel.



Non-Dwelling Units

PHAs may have accessory non-dwelling buildings for maintenance, offices, storage, community centers or other purposes. Some such structures are assigned to the Central Office Cost Center (COCC). COCC property and other buildings that are not under the PHA's ACC should not be included in the GPNA. If these structures are under the ACC and are assigned to a project/AMP, they should be reflected in the GPNA but will not be included in the PIC data imported into the GPNA tool. In order to account for these needs, you will need to add the building into the GPNA tool. To do this, navigate to and select "Edit Development Buildings" under the Development/AMPs column on the Control Panel. Select "add building" at the bottom of the page. A new line will open on the list of buildings named "new building." You should rename the building to be more descriptive for you. You then select "non-Dwelling structure" from the dropdown menu under "type."

Once the building is added to the GPNA tool, the user navigates to Control Panel "add building set" and selects "Non-dwelling structure" from the structure type dropdown menu, then enters a building name. Navigate to the Control Panel, select the newly added building on the building sets list, go to "edit building set," and assign a building(s) to the named set. An inspection form can then be created for it.

Adding a non-dwelling building will not affect validation with PIC at submittal, and adding this building in the tool will not revise PIC.

Identify Sample Size

Selection of inspection samples can have a significant impact on the accuracy and usefulness of the GPNA. The key to careful sample selection is to exercise judgment in considering a group of buildings and units to inspect that reasonably represent the average configuration, components, characteristics, and condition of all of the units or buildings in the set. A minimum of 20 percent of all the Buildings in each Building Set (similar building types of similar ages and maintenance history) and a minimum of 10 percent of the Units in each Unit Set must be inspected. Of course, the greater the percentage of units and buildings that are inspected the more precise and comprehensive the result will be. PHAs should devote some care to the sample selection whether they are performing the GPNA with staff or contracting. If contracting, the vendor will rely upon the PHA's knowledge of the general conditions and configurations and to the extent this is conveyed in the RFP documents. If the PHA can provide a reasonable summary of the inspection quantities in the RFP, the third party assessor can better carry out the work without conflict or misunderstandings.

The GPNA requires a minimum sample of 20 percent of all the Buildings in each Building Set and a minimum sample of 10 percent of the Units in each Unit Set be inspected,

which—in many, but not all cases—will result in a statistically valid sample. Under those provisions, the inspector is required to inspect a sufficient sample of each unit type, building, and property system (e.g., HVAC, roof) to be able to state with confidence the present and probable future condition of the total property (i.e., a statistically valid sampling). This requires observing a sufficient number of units and common areas in each building and each variation of building and/or unit type. Factors which must be considered in determining a statistically valid sample include: building age (including various development phases within the same project); building type (e.g., garden, row house, elevator); building construction materials; unit type (e.g., studio, 1-bedroom); unit size within type (e.g., 512 sq. ft. 1-bedroom vs. 730 sq. ft. 1-bedroom); unit occupancy (e.g., elderly, handicapped, family); unit equipment or amenities (e.g., air-conditioned with in-unit equipment).

Consider the following conditions when determining your inspection sample. At least one of each type of unit (by bedroom count as well as by configuration) must be inspected even if that results in a Set containing only 1 unit. For example, a building may have some three-bedroom units that have a second bath that would make them different. Units with characteristics potentially affecting condition need to be included in the sample, such as top-floor units, basement units, ground-floor units, or end units. You may need to expand the inspection sample in cases where units are not reasonably uniform in their condition. For example, you might have a percentage of your units that have renovated kitchens and a remainder that is not renovated. Your sample needs to reflect that proportion.

If the difference in “configuration” is simply that of the floor plan, and the square footage is nearly the same (plus or minus 10%), but the appliances, equipment, windows, flooring, doors, etc., are of the same age and materials, then the two configurations can be treated as one Set of 3-bedroom unit—at least 10 percent of this Set of 3-bedroom unit should be inspected. If the different configuration results in significant other changes (e.g., townhouse versus flat; different number of bathrooms; different types of HVAC systems; etc.), then they should be treated as different unit types and thus a minimum of 10 percent of each type (Set configuration) should be inspected and included in the GPNA.

Each project *site* must be inspected in its entirety. A single building on a site would be inspected in its entirety on the exterior. On projects with multiple buildings, a minimum of 20 percent of the buildings should be inspected in each Building Set; in the case where the buildings are essentially identical, of the same age, and similar condition. This percentage of buildings and Building Sets to inspect will increase much in the way the unit sample size increases (based on consideration of significant building characteristics). A single common building system would be inspected in its entirety, such as a boiler. A reasonable minimum sample of multiple components in the same systems

component category would be 20 percent and up to 100 percent where conditions are known to vary.

Unique non-dwelling spaces within a building such as a building lobby/mailroom, the main mechanical room, the elevator penthouse, and the community room should be inspected in their entirety. Spaces such as hallways and laundry rooms can be sampled at 20 percent where conditions are known to be essentially identical and up to 100 percent where conditions are known to vary.

The GPNA tool has the capabilities to be a central repository of all kinds of data, such as vendors of components and locations of specific models of an item, and supporting documentation, and photos can be attached to specific line items. If a PHA chooses to use the tool this way, there is nothing to stop a PHA from exceeding the minimum sample or even doing a 100 percent inspection with the tool. The GPNA Tool will automatically scale the cost summaries forwarded to HUD based on whatever sample is used. Note that HUD does not receive this data as part of the upload, so it is essential that your GPNA Tool be backed up and secured using accepted practices as discussed in the Getting Started section of this guide.

Sample Selection for Scattered Site Inventory

The sample selection for a scattered site inventory is perhaps the most challenging judgment for any GPNA process. The first consideration would be whether all these properties are truly different? If there are truly 100 scattered site Single Family Dwellings that are all different, then you must create 100 Building Sets and inspect 100 percent of the Buildings and units, since each Building and unit set is different. If half of them are single story wood frame houses on ground slabs with asphalt roofs, three bedrooms, and two baths built in the 1960s, with square footage that is plus or minus 10 percent, then that might be enough similarity to represent a Building Set. At least 20 percent of these Buildings (10) and units (10) must be inspected. What complicates this example is that each building is also a unit, so this is the one time that both 20 percent of the Buildings and 20 percent of the units within the Sets must be inspected, since this is the one time that the Building Sets inspected have no common areas—and when you inspect the interior of the building you are in essence also doing a unit inspection. For some PHAs, a 100-percent sample of these scattered site properties may be the most appropriate choice, based upon the diversity of the buildings and perhaps management considerations, such as a policy to periodically inspect all units in the inventory.

Creating Unit Sets

A Unit Set refers to an established grouping of Unit areas within a Building, which share characteristics, such as: number of bedrooms, number of full and half baths, ceiling height, and floor area.

In order to achieve a truly representative sample, several factors must be considered in determining how many and which units to include in your sample. A few sampling methods are described below. Every unit must belong to a Unit Set for the program to function correctly.

Dwelling Units

Sample a minimum of 10% of the units in a given development, or more than 10% if required to achieve a representative sample of the dwelling units. Include each type such as:

- Unit size, e.g., one-, two-, and three-bedrooms,
- Square footage
- Unit types in typical buildings such as row houses, duplexes, single family, etc.

You should also consider surveying those units that are more subject to architectural stress, such as:

- Ground floor units
- Units on the top floor directly under the roof
- Units adjacent to elevator cores
- Units on the sides of the building subject to the most weathering

In some cases, PHAs may be required to survey as much as 30%-40% or more of the units for any given development. Within the tool, break up the units into similar sets to ease the burden of determining the sampling size.

Example #1

Development A has 100 one-bedroom dwelling units with the same floor plan. The sampling size is 10% of total units. 10% of 100 units is equal to 10 units.

Example #2

Development B has 100 units:

- 25 with one bedroom
- 50 with two bedrooms and two different floor plans (25 units for each floor plan)
- 25 with three bedrooms

The sampling size is 10% of each type of unit. 10% of 25 one-bedroom units is equal to 2.5, or 3 whole units. Performing similar calculations for the other bedroom types yields a total sampling size of 12% of the total units.

The appropriate sample size for this development is 12 units with the following inspection requirements:

- 3 one-bedroom unit

- 3 two-bedroom unit in floor plan #1
- 3 two-bedroom unit in floor plan #2
- 3 three-bedroom unit

Example #3

Development C has 10 units:

- 3 one-bedroom units
- 3 two-bedroom units
- 4 three-bedroom units

This development has only 10 units; however it has 3 different unit types. In this case, you need three unit inspections to meet minimum requirements for sampling, including a unit of each bedroom size. Accordingly, the appropriate sample size for this development is 3 units or 30% of total units for this development:

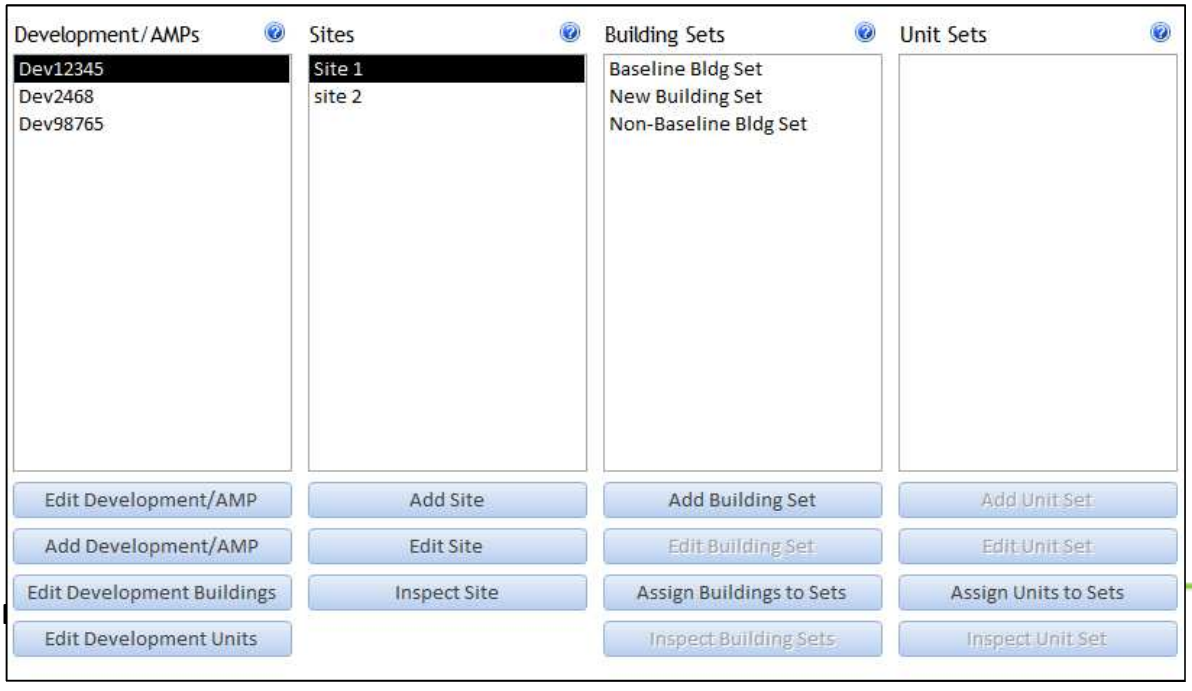
- 1 one-bedroom unit
- 1 two-bedroom unit
- 1 three-bedroom unit

Add a Unit Set

The New Unit Set page is used to input pre-assessment data for a particular set of units within a building.

To add a Unit Set to a Building:

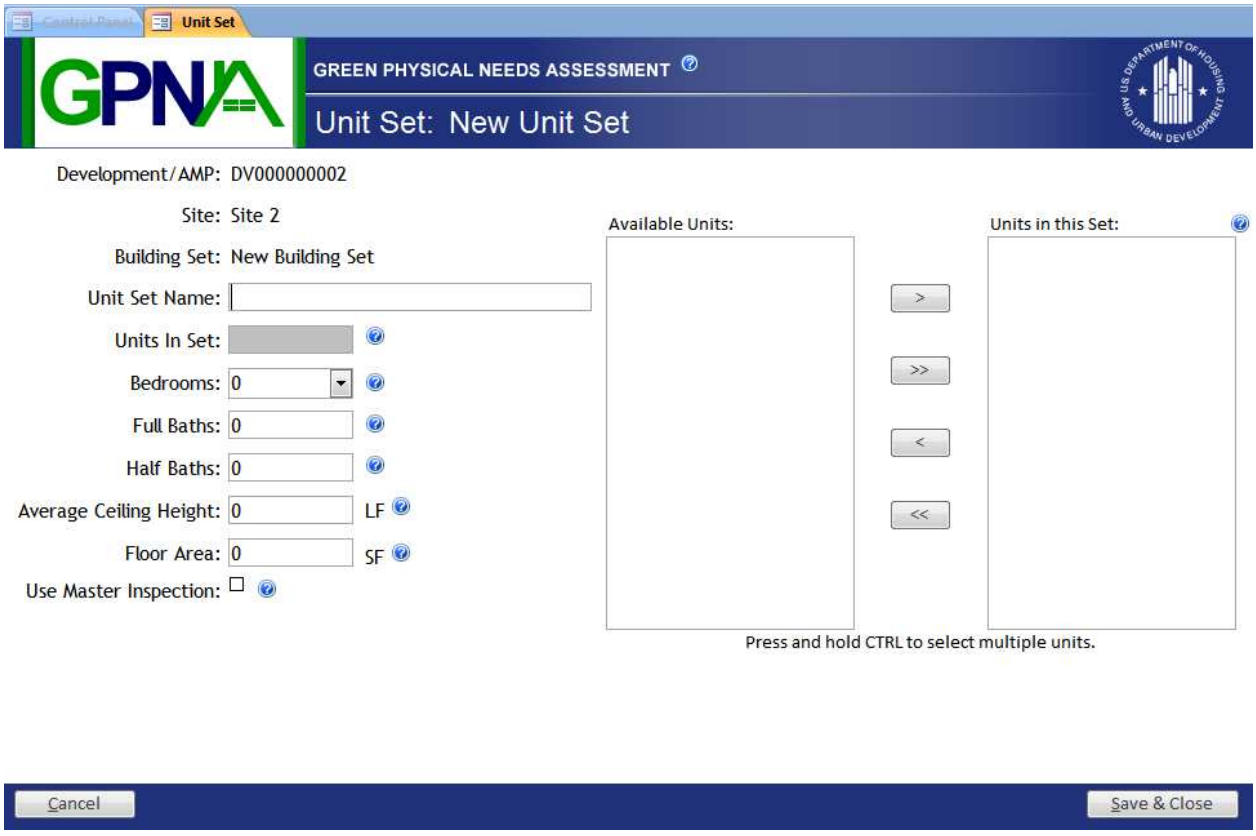
1) Start in the Control Panel.



2) Select the desired Development/AMP from the Development/AMPs column.
3) Select the appropriate Site from the Sites column.
4) Select the desired Building Set from the Building Set column.
5) Click the Add Unit Set button under the Unit Sets column.

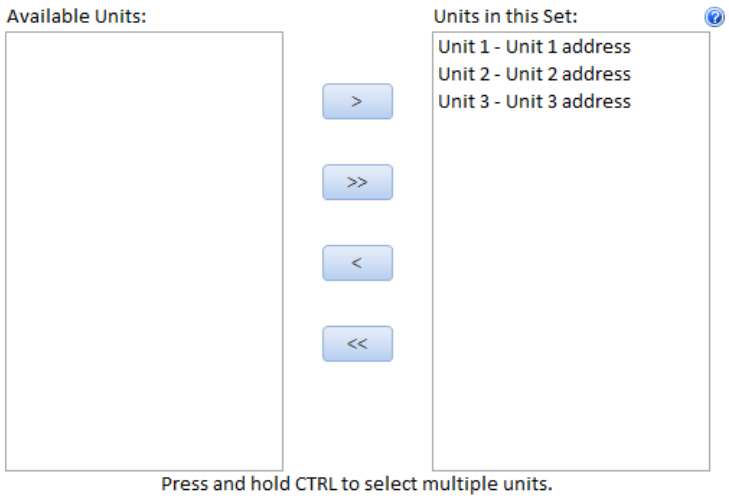
Note: It is not necessary to select a Unit Set from the Unit Sets column to enable the Add Unit Set button.

The New Unit Set screen appears:

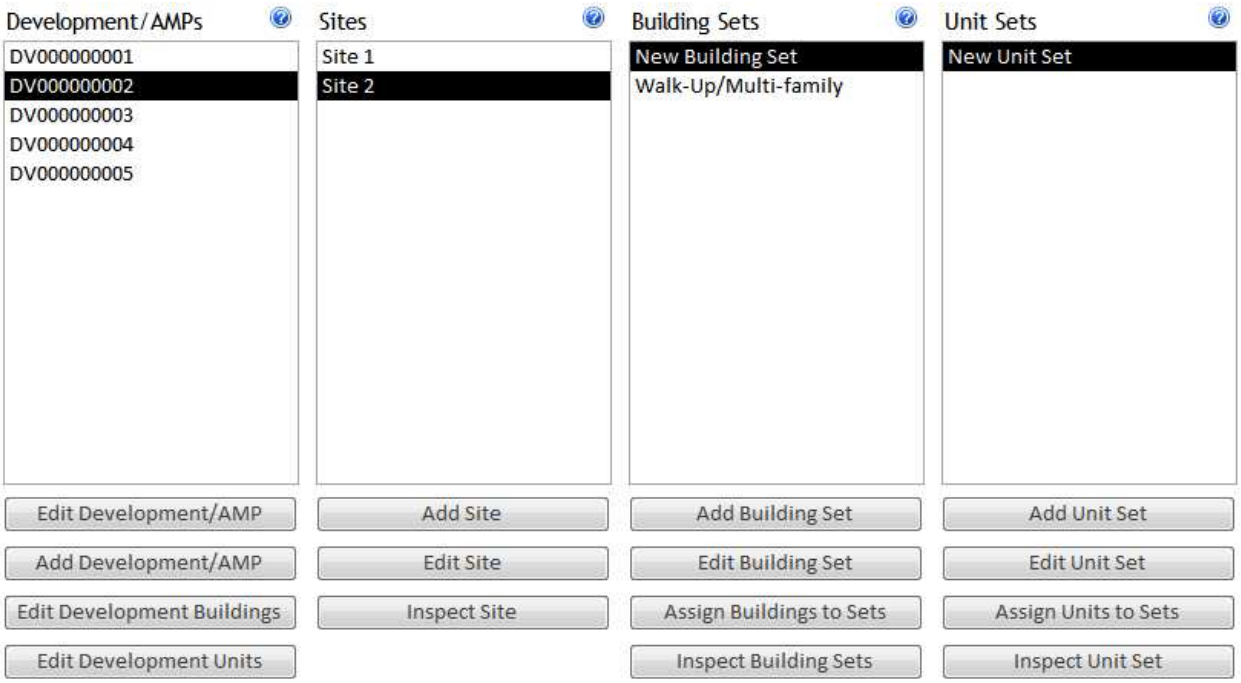


6) Enter a name for the unit set in the **Unit Set Name** field.
7) Enter the number of **Full Baths**, **Half Baths**, **Average Ceiling Height**, and **Floor Area** in the relevant fields (Optional)
8) Selecting the number of bedrooms from the dropdown box will display any units of that bedroom configuration that are in this building set in the “Available Units” space on the page

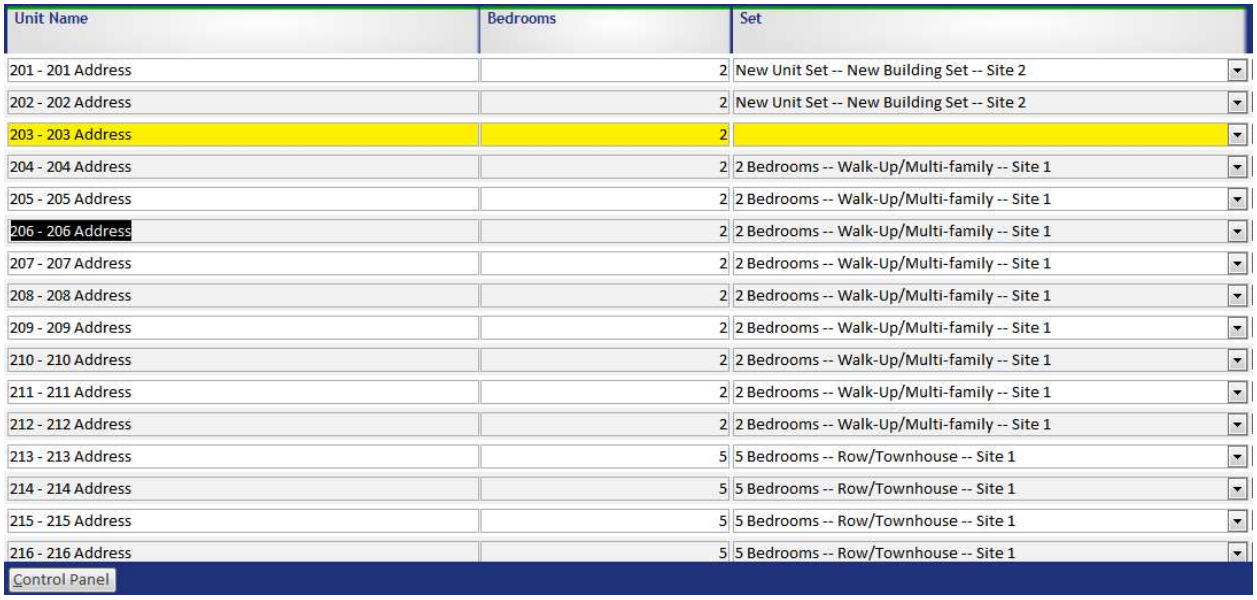
9) Assign any available units to this set using the **Available Units** and **Units in this Set** list boxes. Unassigned Units appear in the **Available Units** list box. Use the arrow buttons to move selected buildings between the **Available Units** and **Units in this Set** list boxes. Remember that all units of the same bedroom configuration may not be alike enough to consider a single set for inspection/assessment purposes. This determination is a judgment of the PHA and its assessor.



10) Once you have finished, click the **Save & Close** button. The new Unit Set appears in the Unit Sets column of the Control Panel.



11) To assign units to this new Unit Set, Click the **Assign Units to Sets** button under the Unit Sets column of the Control Panel. The Assign Units to Sets or the Units in Development/AMP screen appears:



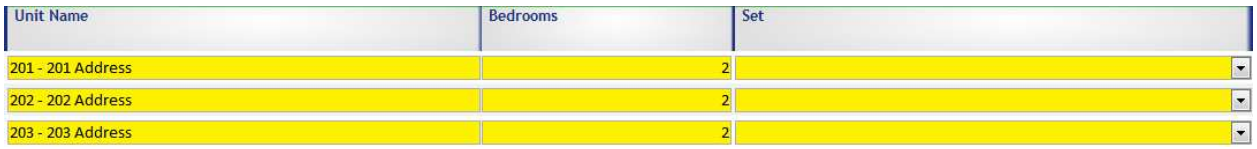
Unit Name	Bedrooms	Set
201 - 201 Address	2	New Unit Set -- New Building Set -- Site 2
202 - 202 Address	2	New Unit Set -- New Building Set -- Site 2
203 - 203 Address	2	
204 - 204 Address	2	2 Bedrooms -- Walk-Up/Multi-family -- Site 1
205 - 205 Address	2	2 Bedrooms -- Walk-Up/Multi-family -- Site 1
206 - 206 Address	2	2 Bedrooms -- Walk-Up/Multi-family -- Site 1
207 - 207 Address	2	2 Bedrooms -- Walk-Up/Multi-family -- Site 1
208 - 208 Address	2	2 Bedrooms -- Walk-Up/Multi-family -- Site 1
209 - 209 Address	2	2 Bedrooms -- Walk-Up/Multi-family -- Site 1
210 - 210 Address	2	2 Bedrooms -- Walk-Up/Multi-family -- Site 1
211 - 211 Address	2	2 Bedrooms -- Walk-Up/Multi-family -- Site 1
212 - 212 Address	2	2 Bedrooms -- Walk-Up/Multi-family -- Site 1
213 - 213 Address	5	5 Bedrooms -- Row/Townhouse -- Site 1
214 - 214 Address	5	5 Bedrooms -- Row/Townhouse -- Site 1
215 - 215 Address	5	5 Bedrooms -- Row/Townhouse -- Site 1
216 - 216 Address	5	5 Bedrooms -- Row/Townhouse -- Site 1

Control Panel

The Units in Development/AMP screen facilitates a broader view of all units in the Development/AMP and helps in finding units that may have been overlooked earlier in the Unit Set creation process.

Note: Unassigned units are highlighted in yellow.

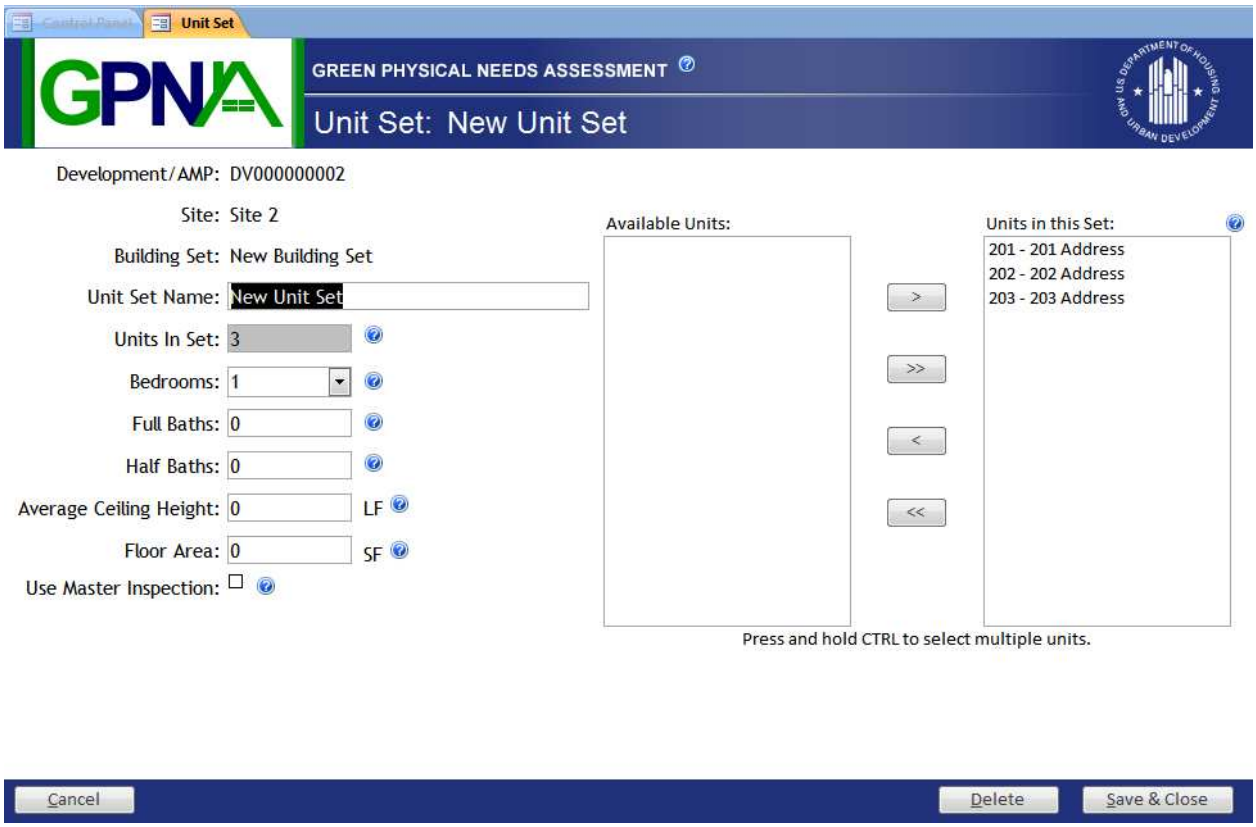
12) Assign units to your Unit Set by selecting the desired Unit Set from the **Set** drop-down menu



Unit Name	Bedrooms	Set
201 - 201 Address	2	
202 - 202 Address	2	
203 - 203 Address	2	

13) Once you have finished assigning available Units to Unit Sets, select the **Control Panel** button.

14) Select your newly-created Unit Set from the Building Sets column and click the **Edit Unit Set** button. (Note: you must first select a unit set from the Unit Sets column to enable the Edit Unit Set button.) The Edit Unit Set screen appears:



The following fields are automatically populated based on previous selections:

- Units In Set
- Units in this Set

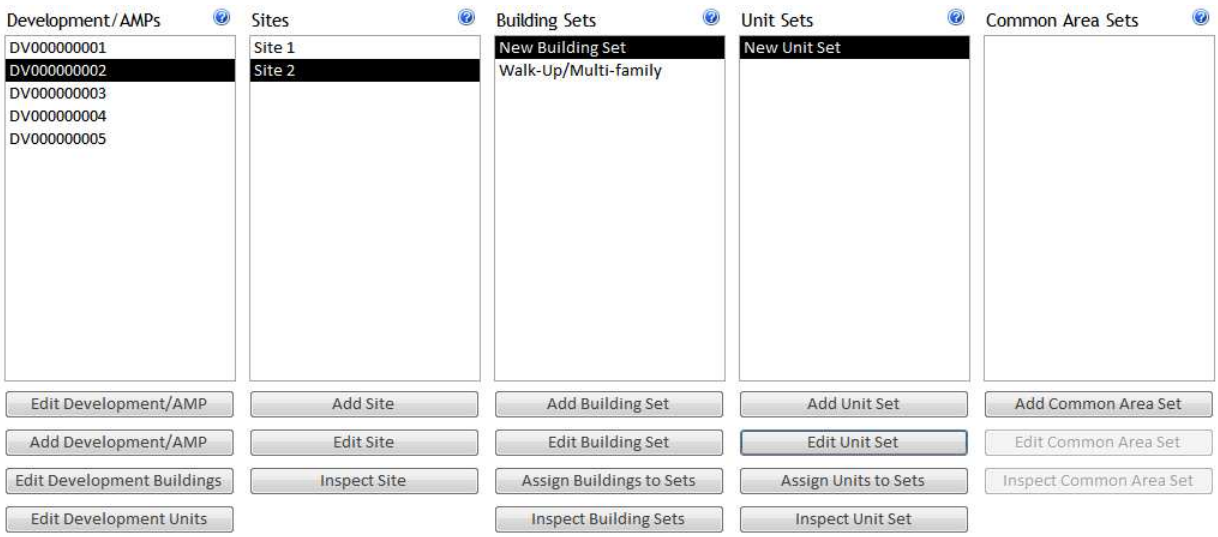
15) Once you have finished editing this unit set, click the **Save & Close** button to return to the Control Panel.

Add a Common Area Set

A Common Area Set is a collection of common areas within a building which share characteristics such as gross interior perimeter wall length, average ceiling height, and gross floor area. The Common Area Set page is used to review and edit pre-assessment data for a set of common areas within a building.

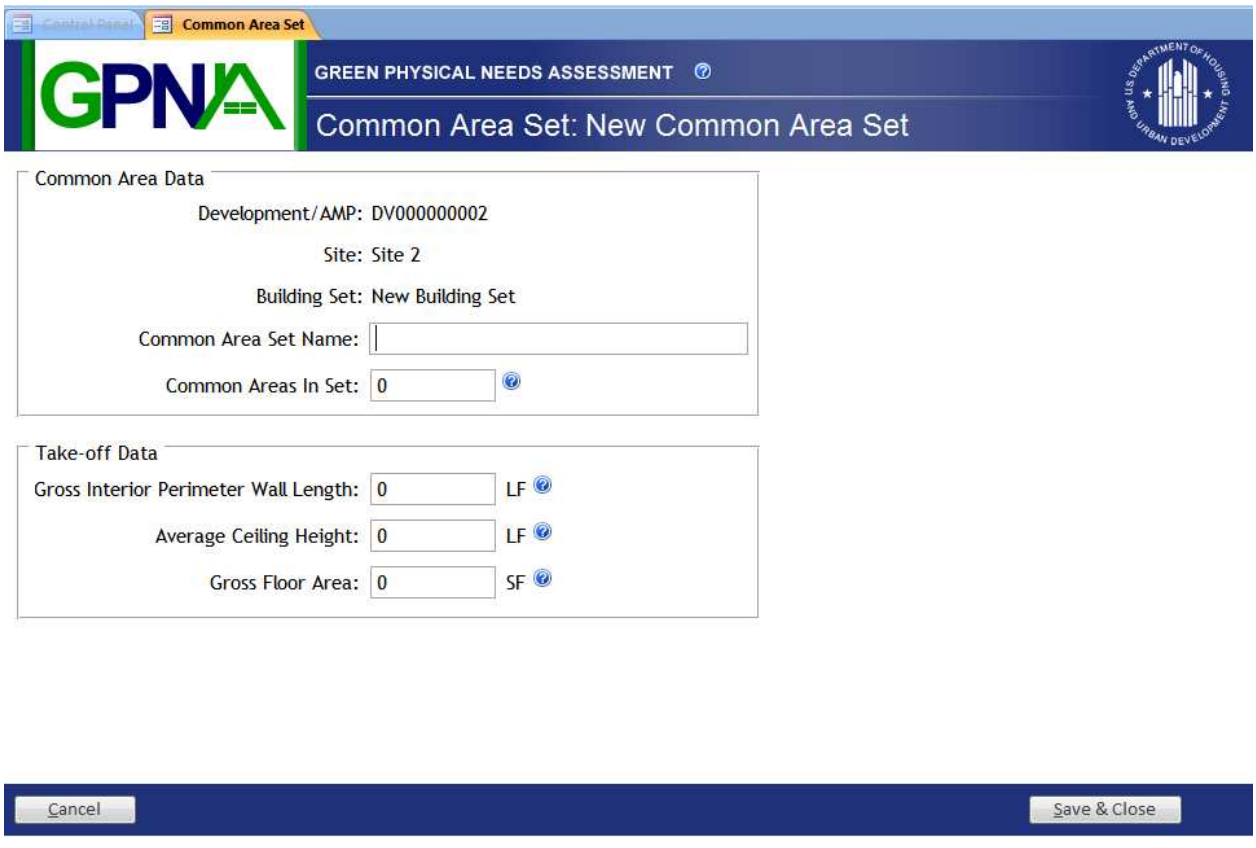
To add a Common Area Set to a Building Set:

1) Start in the Control Panel.
2) Select the Development/AMP from the Development/AMPs column.
3) Select the Site from the Sites column.
4) Select the Building Set from the Building Sets column.
5) Click the **Add Common Area Set** button under the Common Area Sets column



Note: It is not necessary to first select a Unit or Common Area Set to enable the **Add Common Area Set** button.

6) The New Common Area Set screen will appear:



Common Area Set Name - enter a name for this Common Area set

Common Areas In Set – total number of common areas in a building set which share the same characteristics such as gross interior perimeter wall length, average ceiling height and gross floor area. For example if you have a 10 story elevator building with a lobby floor configuration and 9 relatively identical corridors above, you would create a set of 1 to assess the unique lobby floor configuration and a set of 9 to assess the corridors.

Take-off Data - enter the optional pre-assessment take-off measurements as appropriate.

7) When you are finished, click the **Save & Close** button. The new Common Area Set appears in the Common Area Sets column of the Control Panel.

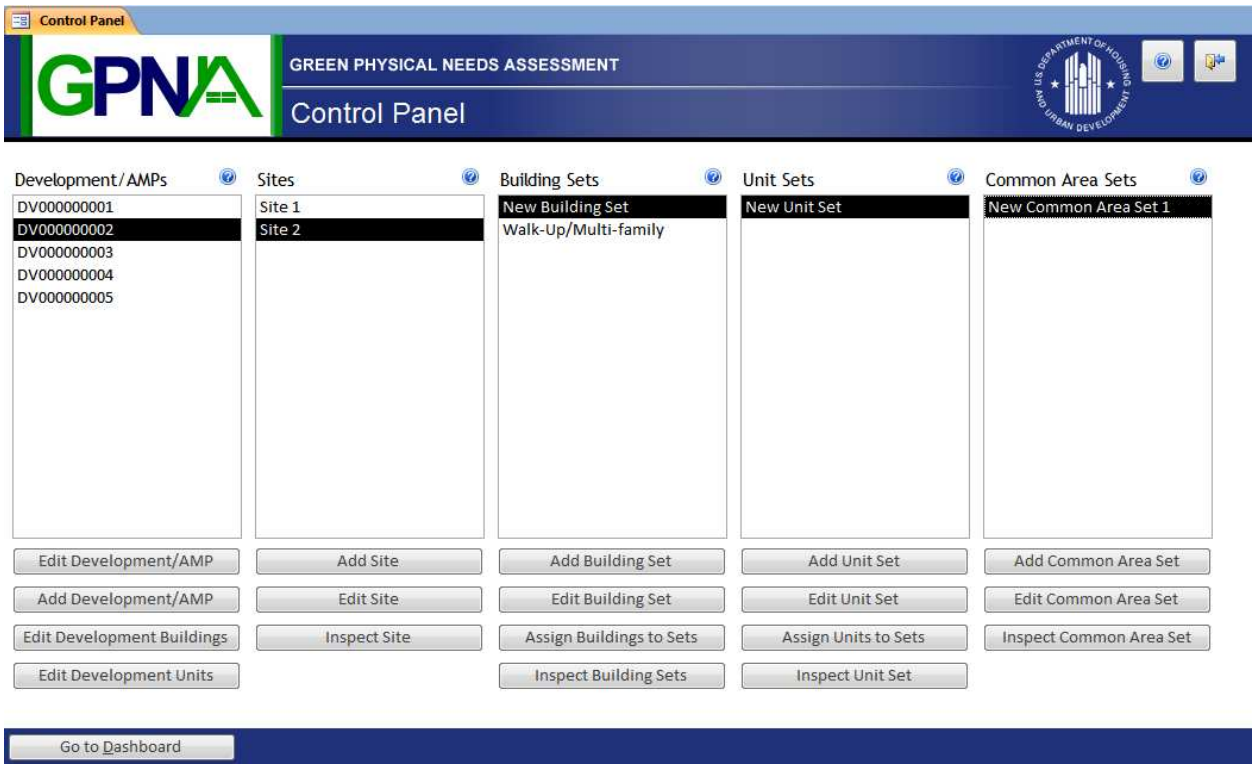
Review and Edit Measurements

Edit Development/AMPs

The GPNA software accommodates the inclusion of different sites and developments within the same Development/AMP. A Development/AMP can be divided into individual sites, and each site can be divided into different building sets (e.g., walk-up versus multi-family or high rise). Different unit types can also be grouped within each Building Set, and different types of common areas can be identified and inspected separately.

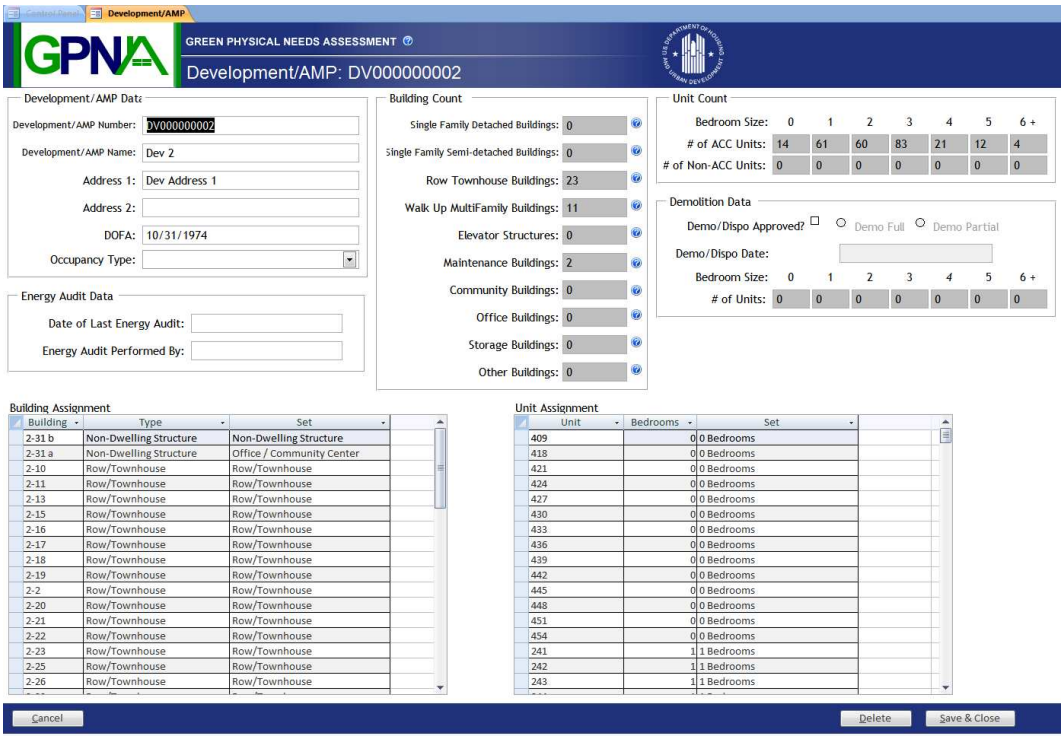
The Development/AMP configuration reflected in the tool is populated from the PIC import and reflects the data that PIC shows-the number of buildings and units within the AMP, the association of units to buildings, the building types, the bedroom size configurations for each unit etc. The user may edit this information in the tool however must exercise caution to avoid a conflict with the PIC data when the GPNA is submitted. No change made by the user in the GPNA tool will be reflected in PIC-inventory changes must be made in PIC through the established procedure. For relatively minor adjustments to the inventory to match PIC at the time of submittal, the following editing procedures may be appropriate. Non-ACC units (such as merged units) and non-dwelling units (community rooms, offices etc) are not validated against PIC at submittal so these types of units and buildings can be added and deleted without creating concern of validation.

To edit a Development/AMP:



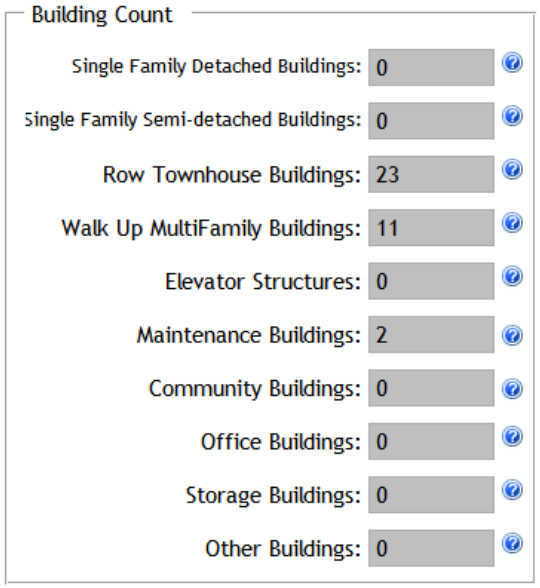
Start in the Control Panel. Select a Development/AMP from the Development/AMPs column, and click the **Edit Development/AMP** button.

The Development/AMP screen appears. From the Development/AMP Data section of the screen, review and edit the following fields as necessary:

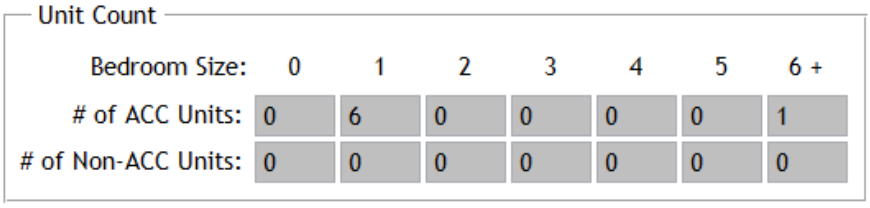


- **Development/AMP Number:** Enter the Development/AMP's assigned number (Note that changing a Development/AMP number can cause an invalid submittal if there is not an identically numbered Development/AMP in PIC at the time of submittal.).
- **Development/AMP Name:** Enter a name for the new Development/AMP.
- **Address 1 and 2:** Enter the street address of the property.
- **DOFA:** Date of First Availability

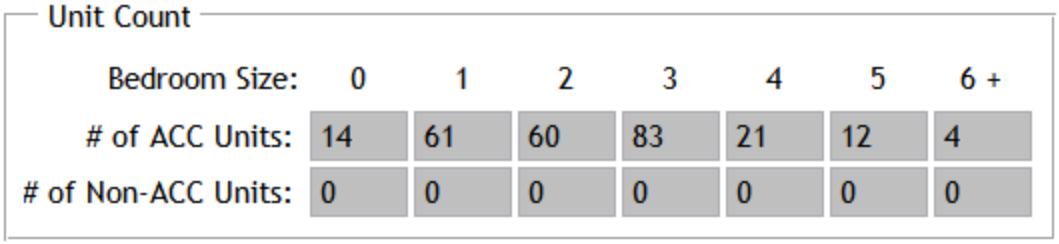
Review and edit the Building Count section for each building type, as applicable.



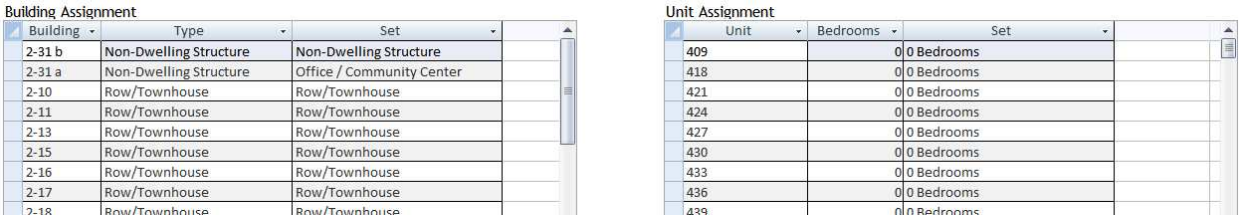
Review and edit the number of ACC and non-ACC units for each bedroom size, as applicable.



Review and edit the Demolition Data section of the screen.



Review all Building and Unit Assignments in the Building Assignment and Unit Assignment tables at the bottom of the screen.



Building Assignment

Building	Type	Set
2-31 b	Non-Dwelling Structure	Non-Dwelling Structure
2-31 a	Non-Dwelling Structure	Office / Community Center
2-10	Row/Townhouse	Row/Townhouse
2-11	Row/Townhouse	Row/Townhouse
2-13	Row/Townhouse	Row/Townhouse
2-15	Row/Townhouse	Row/Townhouse
2-16	Row/Townhouse	Row/Townhouse
2-17	Row/Townhouse	Row/Townhouse
2-18	Row/Townhouse	Row/Townhouse

Unit Assignment

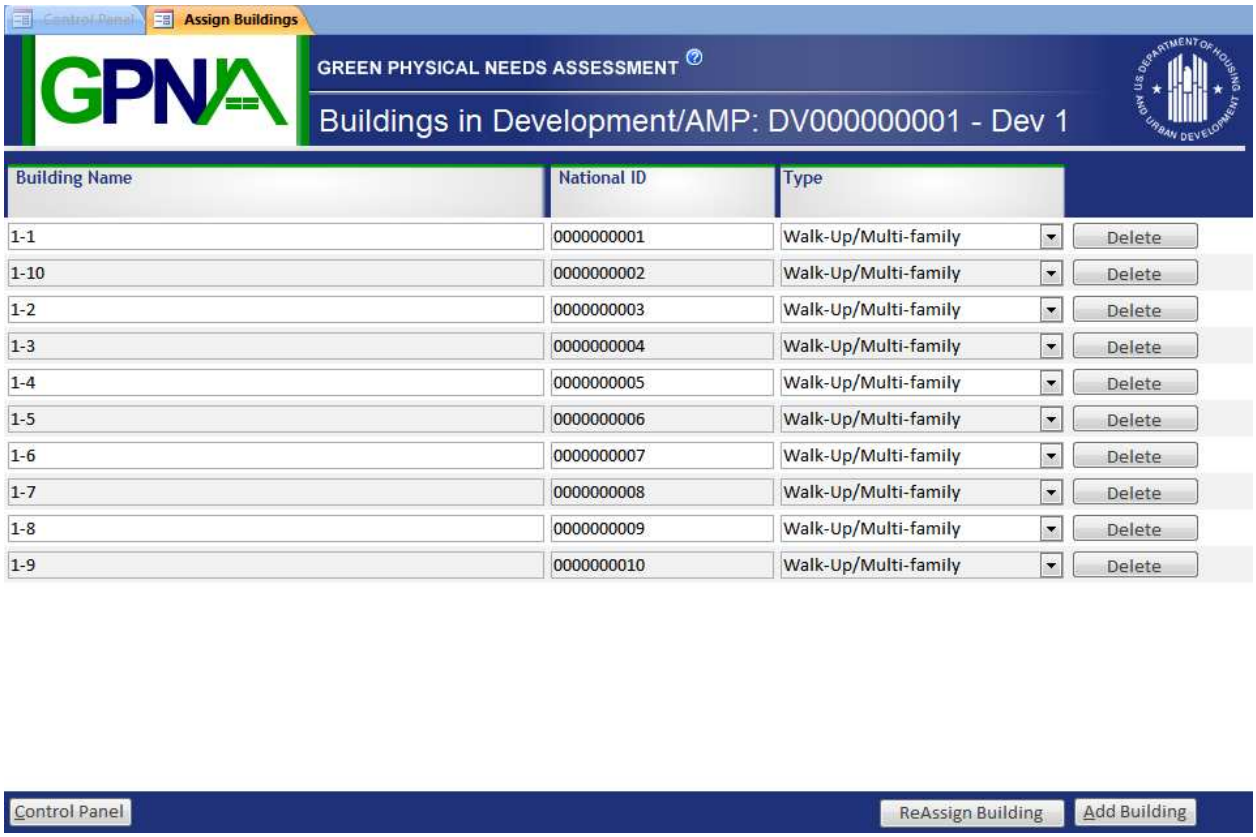
Unit	Bedrooms	Set
409	0	0 Bedrooms
418	0	0 Bedrooms
421	0	0 Bedrooms
424	0	0 Bedrooms
427	0	0 Bedrooms
430	0	0 Bedrooms
433	0	0 Bedrooms
436	0	0 Bedrooms
439	0	0 Bedrooms

When you are finished, click the **Save & Close** button to save your change and return to the Control Panel screen.

Edit Development Buildings and Units

To add, edit, or delete development buildings and units to a development:

1) From the Control Panel, select the Development/AMP for which you want to edit a building or unit and then click either Edit Development Buildings or Edit Development Units.
2) When the **Buildings/Units in Development** screen appears, perform any of the following actions, as necessary:
   - Change the Name and ID for a building or unit by editing relevant fields.
   - Change the Type for a building or unit by clicking the appropriate drop-down and selecting from the list of choices.
   - Add a building or unit to the development by clicking the Add button at the bottom of the screen. A new row appears on the screen that you can edit as described above.
   - Remove a building or unit from the development by clicking the **Delete** button next to the row you want to remove.



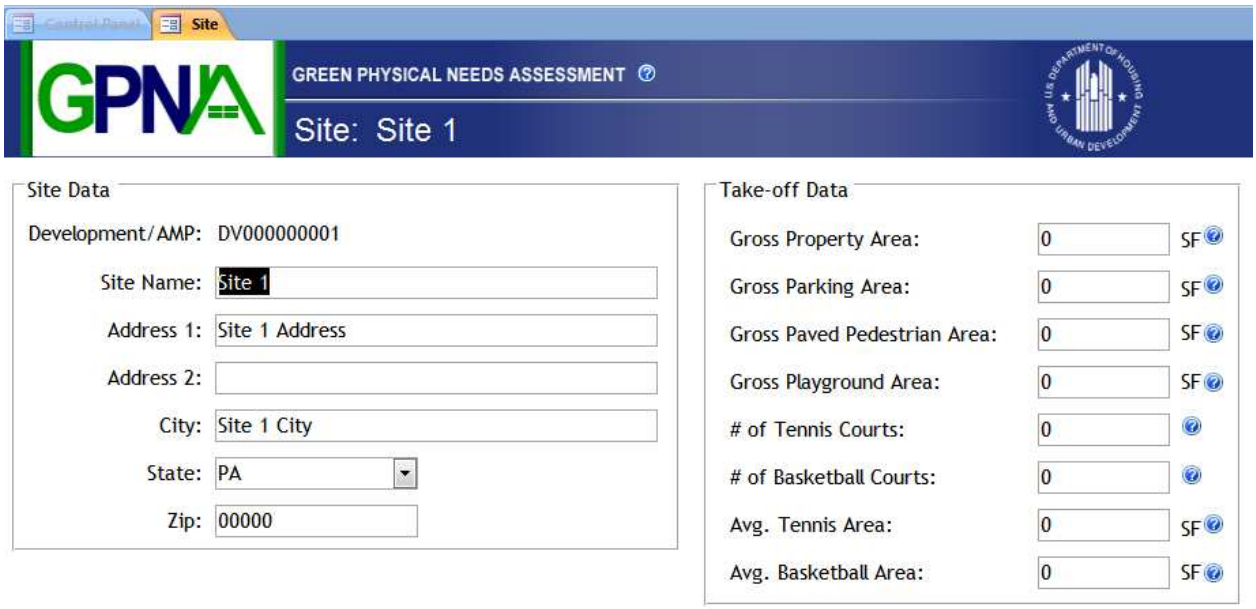
3) Click the **Control Panel** button to save your changes and return to the Control Panel.

Edit Sites

The **Edit Sites** page is used to review and edit pre-assessment data for a particular site within a Development/AMP. Site data includes name and street location for a Site, as well as a square-footage breakdown of the different areas within a Site, such as the parking area and recreation areas.

To edit a Site within a Development/AMP:

Start in the Control Panel. Select the appropriate Development/AMP from the Development/AMPs column, and then select the Site from the Sites column. Click the **Edit Site** button to bring up the Site screen:



In the **Site Data** portion of the New Site screen, review and edit the Site Name, Address, City, State, and Zip information as necessary.

In the **Take-off Data** portion of the New Site screen, review and edit the pre-assessment take-off measurements as appropriate.

Click the **Save & Close** button to save your changes and return to the Control Panel.

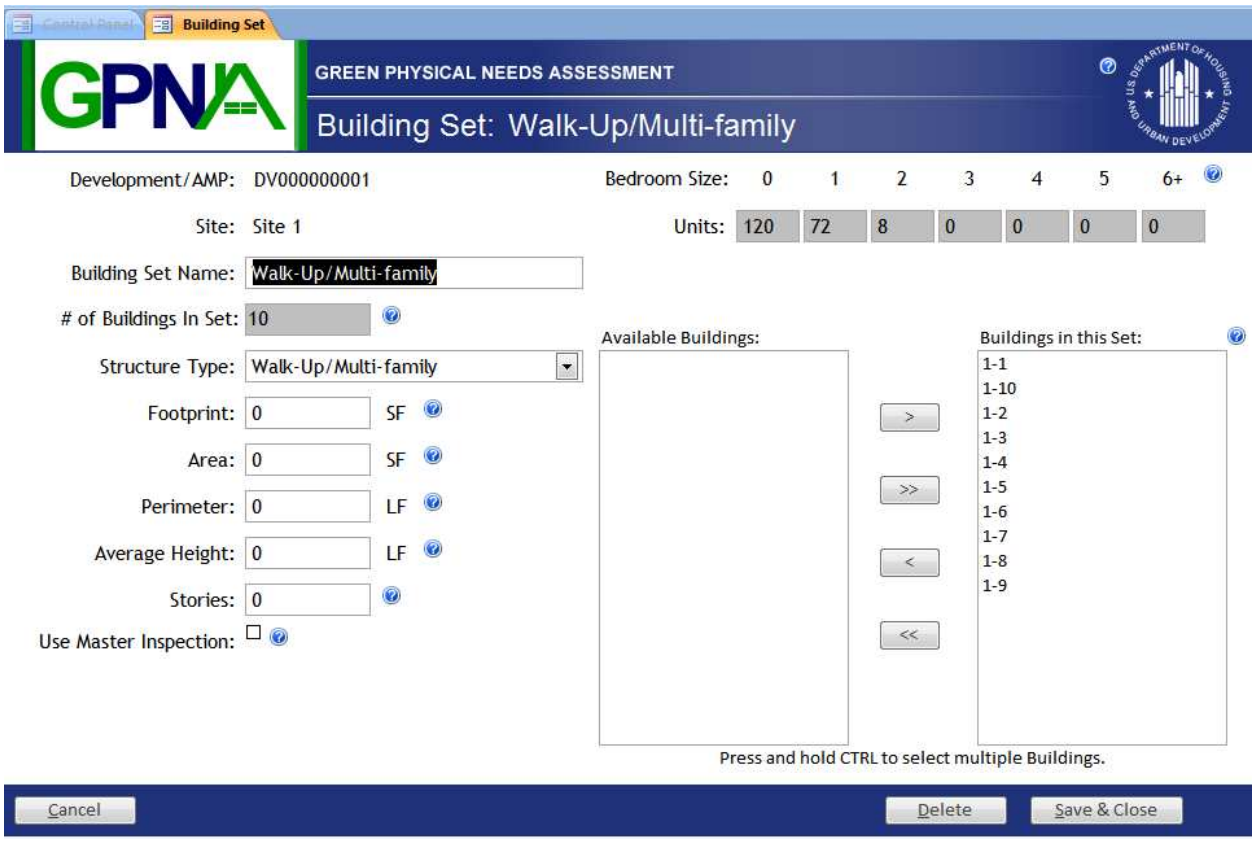
Alternatively, you can click the **Delete** button to remove this site from the Development/AMP.

Edit Building Sets

The **Edit Building Sets** page is used to review and edit pre-assessment data for a particular set of buildings within a Site. A Building Set is a collection of buildings in a Site that share the same characteristics such as footprint, area, perimeter, height, and stories.

To review/edit a Building Set within a Site:

Start in the Control Panel. Select the desired Development/AMP from the Development/AMPs column, then the Site from the Sites column, and then the Building Set from the Building Sets column. Click the **Edit Building Set** button under the Building Sets column to bring up the Building Set screen:



Review and edit the **Building Set Name** and **Structure Type** fields as needed.

Review and edit the square footage and length information for the buildings in this set in the **Footprint**, **Area**, **Perimeter**, **Average Height**, and **Stories** fields as needed.

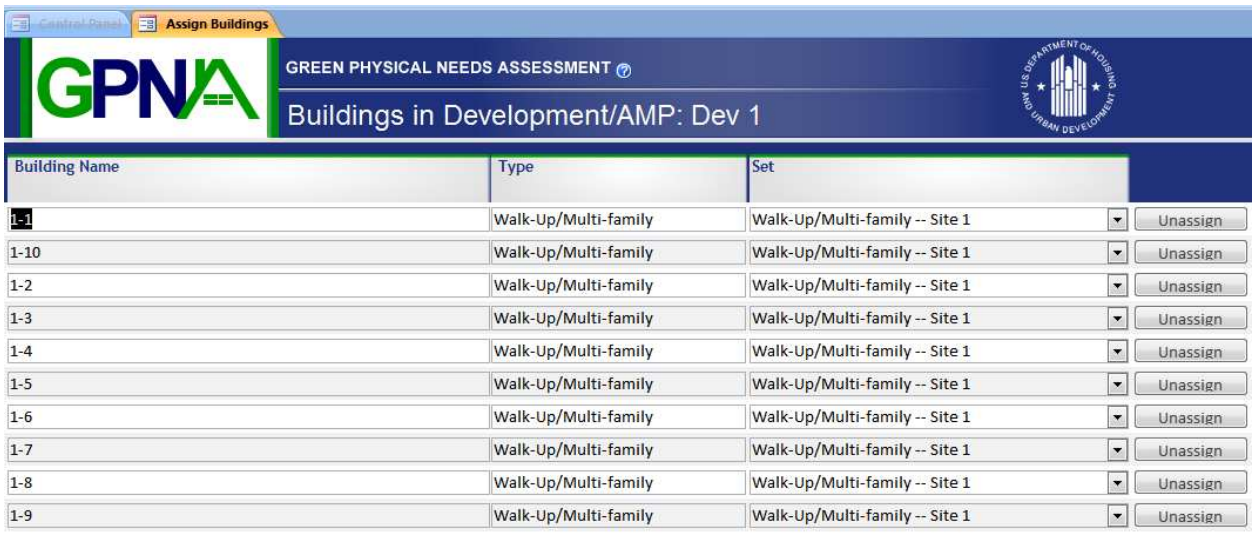
Move buildings to and from the Available Buildings list and Buildings in this Set column by selecting the building(s) and clicking the left and right arrow buttons, depending on what you want to do. Available Buildings are buildings that do not belong to a set.

As you move buildings between columns, Bedroom Size/Units fields automatically adjust.

Click the **Save & Close** button to save your changes and return to the Control Panel screen.

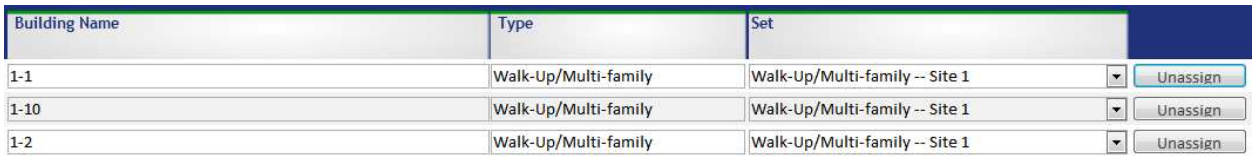
Alternatively, you can click the **Delete** button to remove this Building Set from the Development/AMP.

If you need to assign or remove buildings from this Building Set, click the **Assign Buildings to Sets** button under the Building Sets column of the Control Panel. The Buildings in Development/AMP screen will appear:



From the Set column, assign buildings to your Building Set by clicking the **Set** drop-down for each building and selecting the Building Set name for which you want to add or remove a building.

To remove a building from your set, click the **Unassign** button next to the relevant building row.



Click the **Control Panel** button when you are finished to return to the Control Panel.

Edit Unit Sets

The Unit Set page is used to review and edit pre-assessment data for a particular set of units at a building. A Unit Set is a collection of common areas in a building that share the same characteristics such as the number of bedrooms, number of full and half baths, ceiling height, and floor area.

To review and edit a Unit Set within a Site:

Start in the Control Panel. Select the appropriate Development/AMP, Site, and Building Set, and then select the desired Unit Set from the Unit Sets column. Click the **Edit Unit Set** button under the Unit Sets column to bring up the Unit Set screen:

Review and edit the Unit Set Name, Bedrooms, Full Baths, Half Baths, Average Ceiling Height, and Floor Area fields as needed.

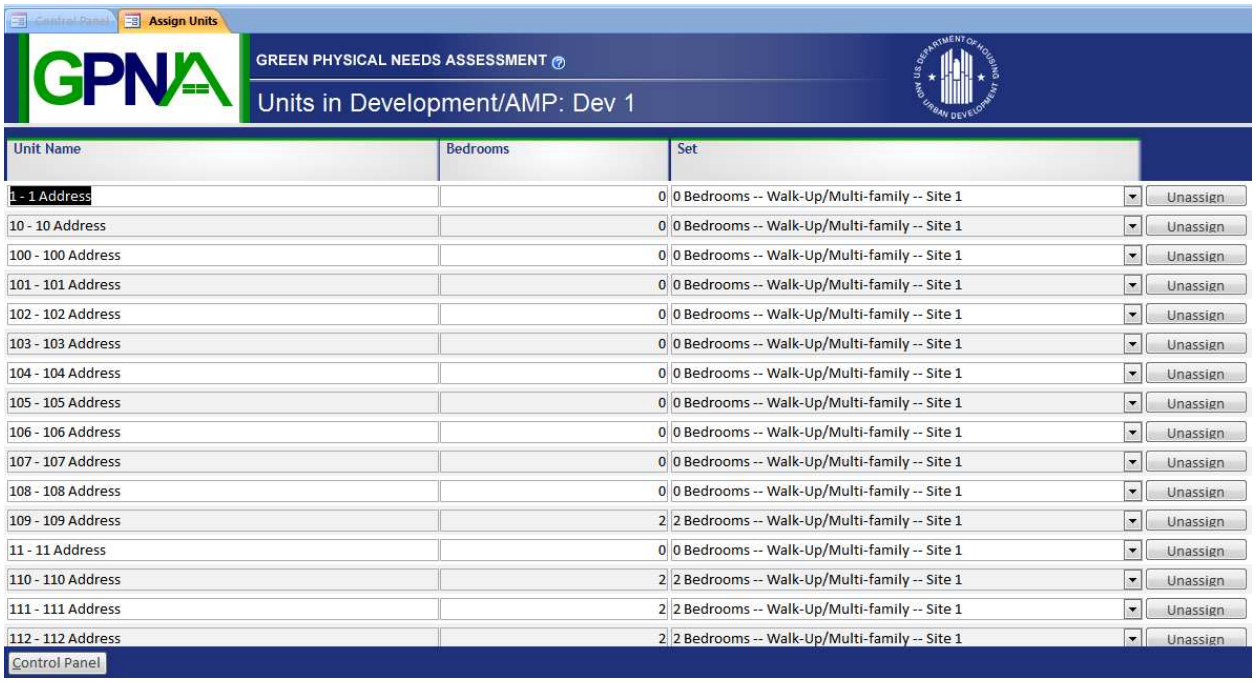
Move Units to and from the **Available Units** and **Units In Set** columns by selecting the building(s) and clicking the left and right arrow buttons, depending on what you want to do.

As you move Units between the columns, the **Units In Set** field automatically updates.

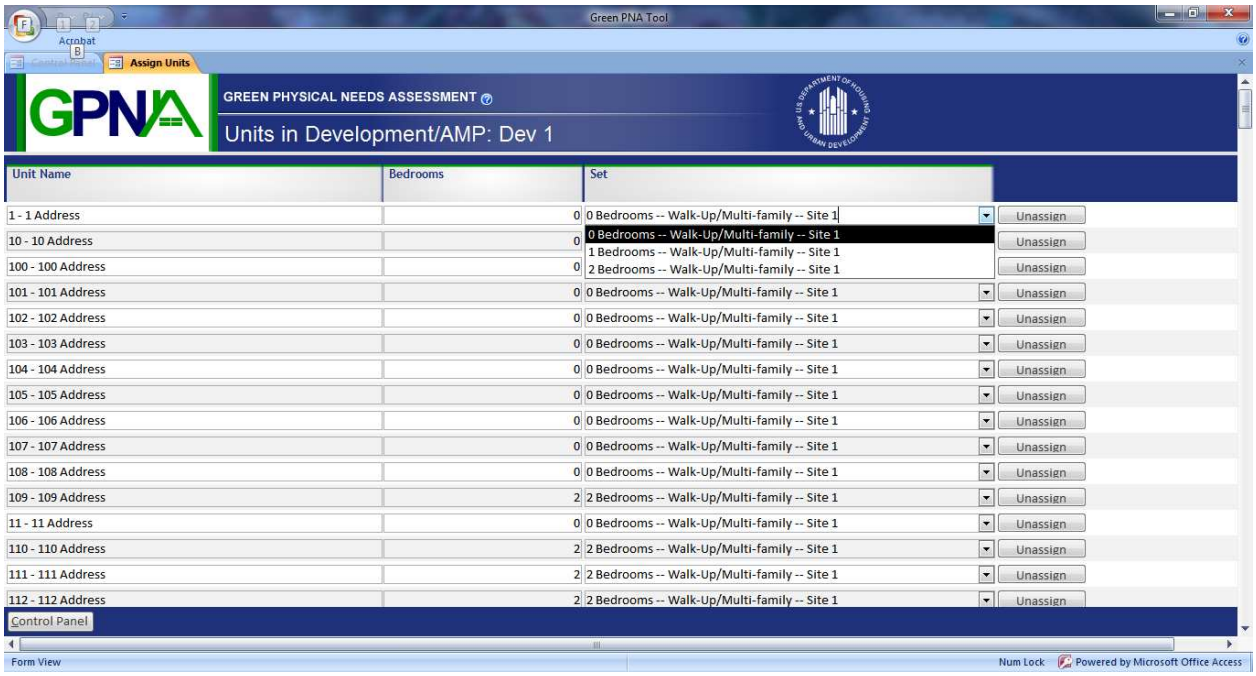
Click the **Save & Close** button to save your changes and return to the Control Panel screen.

Alternatively, you can click the **Delete** button to remove this Unit Set from the Development/AMP.

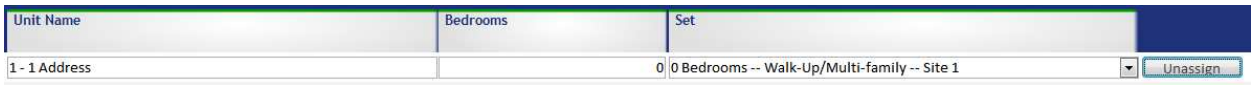
If you need to assign or remove units from Unit Set, click the **Assign Units to Sets** button under the Unit Sets column of the Control Panel. The Units in Development/AMP screen will appear:



From the Set column, assign units to your Unit Set by clicking the **Set** drop-down for each Unit and selecting the Unit Set name for which you want to add a Unit.



To remove a unit from your Unit Set, click the **Unassign** button next to the relevant Unit row.



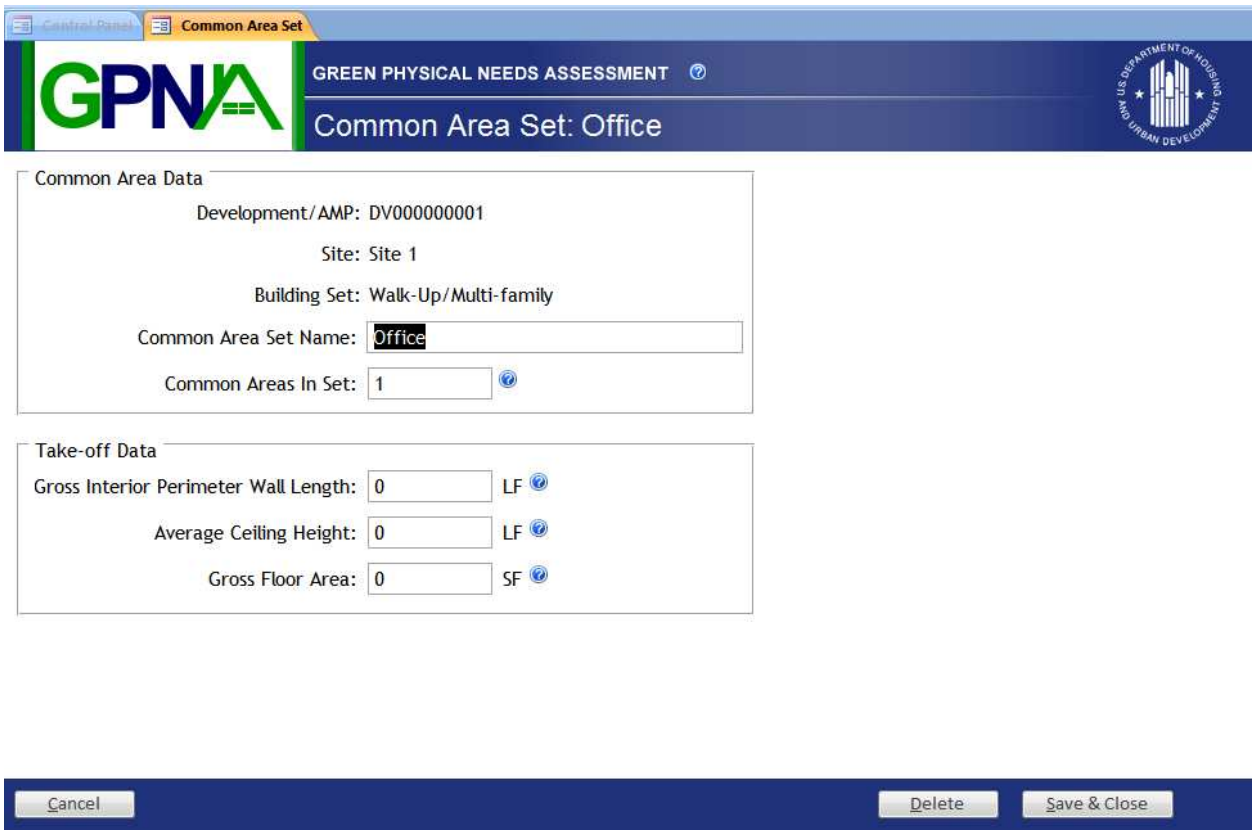
Click the **Control Panel** button when you are finished to return to the Control Panel.

Edit Common Area Sets

The Common Area Set page is used to review and edit pre-assessment data for a set of common areas within a building. A Common Area Set is a collection of common areas within a building, which share similar characteristics such as gross interior perimeter wall length, average ceiling height, and gross floor area.

To review and edit a Common Area Set within a building:

Start in the Control Panel. Select the Development/AMP, Site, and Building Set, and then select the Common Area Set from the Common Area Sets column. Click the **Edit Common Area Set** button to bring up the Common Area Set screen:



Review and edit the information in the **Common Area Data** and **Take-off Data** sections of the screen as necessary.

When you are finished, click the **Save & Close** button to return to the Control Panel. Alternatively, you can click the Delete button to remove this site from the Development/AMP.

Resident Notification

At this point all pre-assessment data should be entered into the tool and you are ready to move to the final step in this phase. Once dates and times for the onsite assessment are confirmed, residents should be notified of their units' inclusion in the GPNA assessment, in compliance with PHA policies. In the event that selected units are not accessible during the scheduled onsite survey, additional units may be recommended for consideration and inclusion.

PHAs may consider seeking resident participation throughout the GPNA process. Resident participation could be achieved through a simple questionnaire regarding unit components. Resident participation is not a GPNA process requirement, but rather left to the discretion of the PHA.

PHASE 2: Assessment – Conducting the GPNA

Quick Steps

Phase 2 focuses on conducting the GPNA. The following provides an overview of the duties associated with conducting the GPNA.

1) Determine a Method of Data Gathering.
2) Perform a Walk-Through.
3) Print the GPNA Inspection.
4) Evaluate Replacement/Refurbishment Components.
5) Identify and Confirm Component Types including Sustainability, Accessibility, and Marketability/Livability Components.
6) Identify Component Quantities.

Please keep in mind that help is only a click away! Look for this icon  to access brief explanations and instructions about various GPNA tool functions.

Determine a Method of Data Gathering

Inspection forms are based on the components entered into your PHA's Master Cost Library and by update of each individual Develpment/AMP cost library . If the take-offs and Cost library are completed during the pre-assessment phase, the inspection forms will be customized during the assessment phase. If not, the GPNA tool will use a built-in list of general building systems and components to populate the inspection forms. The inspection forms can be printed or exported to an Excel file (that can be loaded on to a compatible electronic hand-held device).

The form itself captures whether the component is present or absent (AB), the take-off (measurement/quantity) Unit of Measurement, whether it should be a refurbishment or replacement, and the Remaining Useful Life (RUL) of the component. In addition there is a comments section that allows you to record notes and/or add pictures. Within the GPNA tool, the data entry will look similar to the offline form to promote ease of use during the data entry process.

There is no requirement that the inspection functions of the tool be used if the PHA has recently performed a PNA and has a 20 year spreadsheet of needs. That needs data can be directly entered into the 20 year projections pages for each AMP. A cost library is still required and set composition is still required.

The PHA may contract with any qualified vendor to perform the energy audit with its qualified staff. Qualifications for performing an energy audit will be included in the final rule. A reputable certification from a state or national certifying agency is a required qualification for the performance of an energy audit. The American Association of Energy Engineers (AEE), the Building Performance Institute (BPI), and the Residential Energy Services Network (RESNET) are examples of reputable national certifying agencies for energy audit professionals.

Perform a Walk-Through

During the walk-through, you will observe all building/site building systems and components at the Development/AMP and record observations. Within the GPNA tool, each development will have a data collection form for site, building exterior, building systems, common areas, units, building mechanical equipment, and non-dwelling equipment.

The forms are standardized with a list of components applicable to the area of the site that is being assessed. The form elements include the following:

- Development data
- Building/site component line item to be observed
- Take-off (from pre-assessment or for recording measurements by the assessor)
- Unit of measure (SF = square feet, LF = linear feet, # = total unit count)
- Refurbishment and replacement
- Date of installation = year (age)
- Comment (brief word narrative to be used at your own discretion)

The GPNA tool is designed to facilitate systematic data recording of the physical condition of each component based upon the standard of that component.

Each PHA is responsible for meeting local building code standards and/or other state and federal requirements.

A walk-through involves the following steps:

1) Inspect the building exteriors and grounds.
2) Inspect the building systems.
3) Inspect the units.
4) Inspect the common, community, and offices areas, grounds, fencing, and parking areas.

During the walk-through assessment, you can take photographs as appropriate in order to support the required replacement or refurbishment actions as determined by the PHA. These photos may be useful in justifying replacement or refurbishment actions later and can be attached to specific line items during the post-assessment phase from the Inspection screens, including the Site, Building Set, Unit, and Common Area Inspection screens.

Items Needed for the Assessment

To perform the on-site assessment, you should be equipped with items such as:

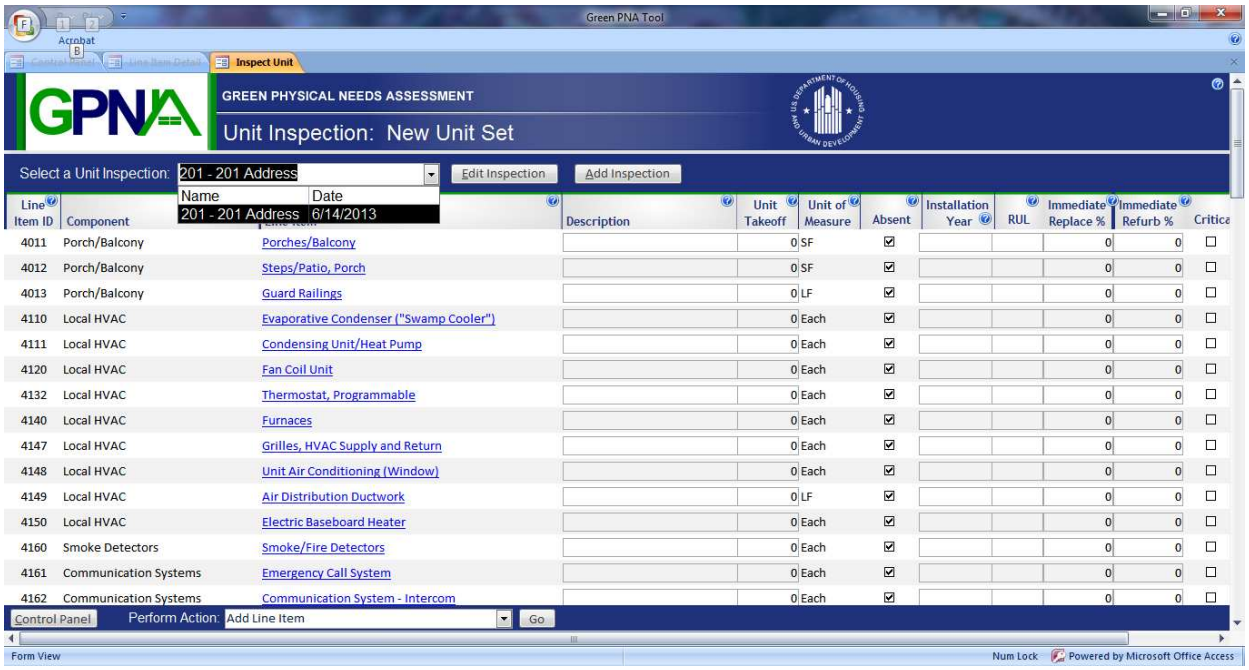
- Tape measures and measuring wheels
- Digital camera
- Ladder for access to roofs/attics
- Unit Entry Notification Forms in the event a pass key is used to gain entry
- Pass key or escort with pass key
- Flashlight
- Site map if not familiar with the development
- GPNA Inspection forms, either printed paper version or via electronic device

The PNA should reflect exactly what the PHA is doing. If the PHA wants to remove an item that is no longer needed, required, or serviceable and does not want to replace the component, the appropriate action in the GPNA is to remove it or simply not assess it as a component. That action would remove it as a capital need – either an immediate need or in any one of the 20 years covered by the GPNA.

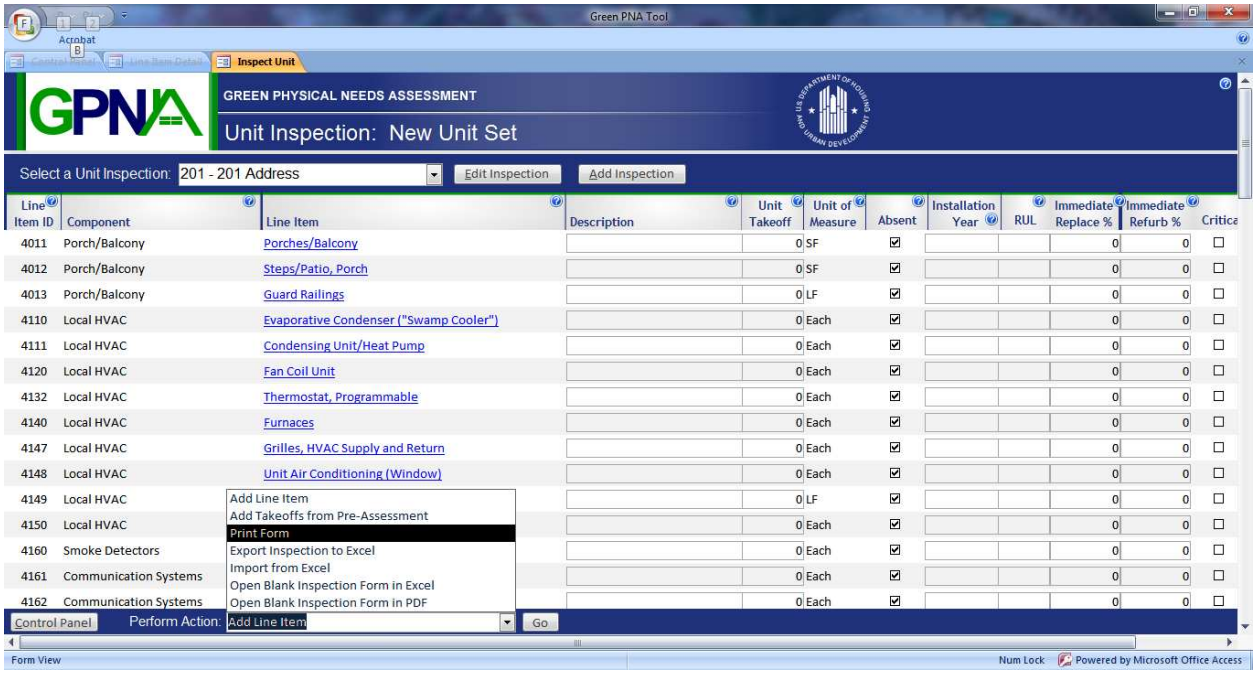
Print the GPNA Inspection

To print an inspection:

1) From the Control Panel, choose your PNA and then select the Development/AMP from the Development/AMPs column.
2) Continue by selecting the relevant Site, Building Set, Unit Set, and or Common Area Set until you locate the component that requires the inspection data.
3) Click the **Inspect** button underneath the selected component to open the Inspection window for that component.
4) Choose the inspection to print from the **Select Inspection** drop-down menu.



5) Click the Perform Action drop-down menu at the bottom of the screen, select Print Form, and click the Go button.



6) When the Print window appears, select the name of the printer and click the **OK** button.

Export an Inspection to an Excel File

The advantage of exporting the inspection form to an Excel file will allow multiple users to perform data entry and then simply import data back into the tool.

To export an inspection to an Excel file:

1) Start in the Control Panel, select the Physical Needs Assessment containing the desired inspection from the **Select a Physical Needs Assessment** drop-down

2) Select the desired Development/AMP from the Development/AMPs column.

3) Select the Site from the Site column and select Inspect Site.

The Site Inspection screen will appear:

4) Use the Perform Action drop-down menu to select **Export Inspection to Excel** and click the **Go** button.

Note: Each Inspection screen contains a Perform Action drop-down menu, whereby the user may export any inspection to an excel file, including Site, Building, Unit, and Common Area Set inspections screen

5) After Excel launches and displays your exported inspection, save the Excel file to a location on your PC.

Evaluate Replacement/Refurbishment Components

PHAs may elect to implement a replacement/refurbishment strategy for varying building systems and components. Due to budgetary constraints, a more practical approach may be to refurbish failing building systems in lieu of a total replacement.

A capital refurbishment is defined as a comprehensive repair activity of a building system or component that is beyond the normal scope of general maintenance, and extends the EUL of the building system or component. For refurbishments, the EUL of the refurbished building systems or components must be at least 50% of the EUL for a replacement system or component.

The EUL for a GPNA component is generally the number of years that a building system or component is expected to be functional (is useful) from the time it is new until it wears out, is no longer functional, and needs to be replaced. The EUL is one of the key entries required in the GPNA Tool to produce the cost projection. The EUL is entered on the cost library for each component. See the Cost Library discussion for additional information.

For standard Replacement EUL information, see the Expected Useful Life Table in the publication "Fannie Mae Physical Needs Assessment Guidance To The Property Evaluator" or see Expected Useful Life Tables, Attachment D in USDA Rural Development's Unnumbered letter dated January 7, 2011. Some states also publish Expected Useful Life Tables for their various agencies. R.S. Means publishes an EUL table in its Preventative Maintenance volume.

The Remaining Useful Life (RUL) is not simply the EUL minus the age of the component. Some equipment may have received regular preventive maintenance and been well treated, so that the remaining useful life, when added to its "age", would exceed the estimated EUL. It is the experience and judgment of the inspector, based on a visual inspection of the current condition of the component, which determines each item's estimated RUL. The RUL is entered on the inspection form for each item and is one of the key entries required to produce the cost projection. The year of installation column is provided but is not a necessary entry. The tool will always default to the RUL entry.

A capital refurbishment strategy may only be accounted for within the first five years of the GPNA's 20-year accrual. Any needs after Year 6 of the accrual are strictly projected as replacement costs.

Advanced Content: Refurbishment Tracking

The GPNA allows the user to account for refurbishment activities reflecting the reality of most public housing authorities. Using the refurbishment tracking functionality of the GPNA can contribute to a more accurate assessment if a user chooses to use it, but it can increase complexity. Note that the tool only permits refurbishment to be planned for the first 5 years so that the subsequent replacements more than 5 years later would be calculated by the tool at the replacement cost level. In the case of a component that may at the time of inspection indicate that it has reached the end of its useful life, sometimes a judgment can be made that a portion of the component could be refurbished at lower cost instead of replaced. An example might be a chain link fence with portions that have posts and cross members remaining firmly stable and other portions where posts and cross members are unstable, bent, or otherwise in need of total replacement. In this case the tool allows the user to set the proportions of replacement and refurbishment. This will create a separate line in the cost projection for the refurbishment estimate.

Identify and Confirm Component Types

After you complete the walk-through assessment, verify each element of the inspection form (collection form/electronic entry), complete the data collection for building systems and components, and review the documents/data to check for completeness, accuracy, and quality review checks.

A best practice for the GPNA is to consider components rather than assemblies; the GPNA Tool uses information from each component to make its calculations. Individual components have different projected and actual life expectancies and related costs that would not be captured using an assembly model. As with the composition of sets, the results will only be as useful to the PHA as the accuracy of the life expectancy of the components.

The predefined line items for the various components are designed to cover a broad range of component types. If you are not able to find a Line Item that fits your situation, you can Add Line Items more specific to your property. This is done by selecting “Add Line Item” from the Perform Action bar at the bottom of the Master Cost Library page. This action will add the same line item to the applicable inspection forms and cost projections. When adding a line item you should assign it a line item number that conforms to the numbering convention of the tool so that the item will be calculated within the correct category. For example, site components are in the 1000 number series, building exterior components are in the 2000 number series, etc. You can also revise the existing line item descriptions to better fit your specific component. At the end of each line on the Master Cost Library is an “edit” button that opens an editing page. It is important that all component costs are accounted for, but ultimately only summary cost

data are sent to HUD. However, it is advisable that conventions are followed in adding and modifying line items to make future revisions easier.

Identify Sustainability Components

The sustainability needs component serves to record information from the energy audit performed in conjunction with the GPNA. All PHAs are required to perform an energy audit: "All PHAs shall complete an energy audit for each PHA-owned Development/AMP under management, not less than once every five years."

The energy audit must be carried out in such a way as to capture core Energy Conservation Measures (ECMs). In an AMP with all like buildings, this may be possible at an AMP level. AMPs with multiple building types will probably require a further breakdown to capture an accurate picture.

The green items identified for consideration by an energy audit, as well as the green principles within the sustainability needs component, serve as a base to develop the sustainability needs component. Existing cost/benefit formulas from an energy audit will be reviewed to help assess the most accurate way to determine cost effectiveness of green replacement items. The sustainability schedule will track only those incremental expenses related to installing green/energy efficient components replacing non-green components. It should be noted that this section within the GPNA is not an Energy Audit, and does not take the place of a PHA's energy audit requirement.

The sustainability needs component will consist of a library of component items known to provide cost effectiveness, energy efficiency, and other environmental benefits. Where possible, this list will correspond with applicable line items within the building/site building systems and component list. "Other" sustainable components may be entered based upon the PHA's energy audit.

HUD maintains and links to a number of resources related to energy audits and energy conservation. The proposed rule and related information is at the Physical Needs Assessment Web page:

http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/capfund/physicalassessment

The Public Housing Environmental and Conservation Clearing House can be accessed at:

http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/phecc

Your Sustainability component should fall into the following strategic methods:

- These are standard components for which costs are known, such as appliances, lighting, and plumbing fixtures. Green appliances can be justified, and payback can be calculated using a simple payback calculation.

- These are customized components for which an energy audit and building professional may be required. The components include the building envelope (windows, doors, and insulation), HVAC equipment, and controls. An energy audit and a contractor's expertise are required to cost appropriate components and calculate the energy savings. When making recommendations, the contractor must consider the maintenance costs and situational appropriateness of suggested green components, as well as energy savings. Resulting cost, payback, and useful life data are documented within the GPNA tool.
- These are components without a financial payback (e.g., cabinet materials, paints, and landscaping). In this case, recommended replacements may be practical and proven green options to consider, but they do not offer any financial payback or energy conservation.
- Along with building envelope, HVAC and controls, Energy Auditors should also check for water saving devices, such as low flow aerators, shower heads, and toilets.
- When calculating payback on energy and water saving devices, energy conservation incentives should not be considered. These incentives are often short-term or unpredictable and cannot be guaranteed.

Instructions for entering sustainability needs data into the GPNA Tool are included in Phase 3: Post-Assessment – Completing the GPNA below.

Identify Accessibility Components

The accessibility needs component of the GPNA serves as a measurement tool that only tracks improvements necessary for adding accessibility functionality. Existing accessibility components are tracked in the replacement needs component.

The GPNA tool is not intended to be a compliance tool and will not document the number of accessible units for the purpose of compliance. The GPNA accounts for the costs to achieve accessibility in units and common areas.

The GPNA tool captures incremental accessibility work and the associated cost under the appropriate building/site component. The tool has a data field that indicates if the additional work identified in the GPNA and the associated cost is related to the provision of accessible units. Individual components that are already accessible at the time of the GPNA should not be included as accessibility needs. Only if a component is added for accessibility will it be entered into the accessibility data field. After completion of the GPNA, the GPNA tool will calculate all work for which the accessibility data field was checked under the accessibility component showing the individual work items, the cost of the individual work, with the total cost associated with providing incremental accessibility.

Instructions for entering accessibility needs data into the GPNA Tool are included in Phase 3: Post-Assessment – Completing the GPNA below.

Identify Marketability Components

Marketability or livability components are capital improvements that add new functionality that did not previously exist, or that promote occupancy by keeping and attracting new tenants. In some markets where rents are low and plenty of choices are available, marketability may make the difference between viable and non-viable properties. Capital improvements go beyond capital replacements in that they provide components with new functionality not currently present.

A combination of factors, including obsolete design, technological advances, maintenance issues, and lack of upgrades or modernization, contribute to the marketability and livability of properties.

PHAs should consider marketability/livability improvements as market-related capital expenses with the goal of increasing curb appeal, reducing vacancies, and modernizing systems with modest efforts to address obsolete designs. Additional items may be considered redevelopment, rather than marketability/livability improvements.

Instructions for entering marketability data into the GPNA Tool are included in Phase 3: Post-Assessment – Completing the GPNA below.

Identify and Confirm Component Quantities

At this point, all of your data should be recorded for the three most important data points for each component item present: **quantity**, **condition**, and **age** (as indicated by an actual or estimated date of installation).

PHASE 3: Post-Assessment – Completing the GPNA

Quick Steps

Phase 3 of the GPNA focuses on the completion of the GPNA and post-assessment. The following procedure presents an overview of the steps required to complete a GPNA:

1) Input data collected into the GPNA tool.
2) Build the Cost and EUL Libraries.
3) Conduct Quality Control procedures.
4) Prepare the GPNA report.
5) Submit the report to the HUD Central Database.

Please keep in mind that help is only a click away! Look for this icon  to access brief explanations and instructions about various GPNA tool functions.

Enter GPNA Data into GPNA Tool

You must record the data collected from the assessment into the GPNA tool in order to calculate the cost projections for a Development/AMP.

You can enter the take-off data from the Site, Building, Unit, and Common Area Sets into the GPNA tool. If you have already input data into your Master Cost Library, it may be necessary to update the Cost Library again to add additional components found during the assessment.

Add/Edit/Delete an Inspection

Each HA Development/AMP has five components available for assessment:

- Site
- Building Exterior
- Building Systems
- Units
- Common Areas

In the GPNA tool, each Development/AMP has a list of Sites and each site contains Building Sets, which contain Unit Sets and the Common Areas.

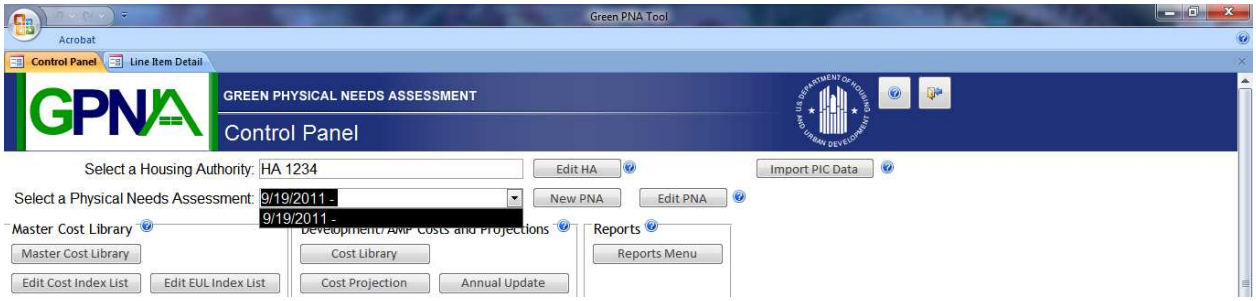
Note: Building Sets contain both the Building Exterior and Building Systems data.

Add a New Inspection

You can either enter a new inspection record or import a GPNA inspection Excel file.

To enter a new inspection record for your selected component:

1) From the Control Panel, select the Physical Needs Assessment that contains the relevant components by clicking the **Select a Physical Needs Assessment** drop-down and selecting a GPNA from the list.



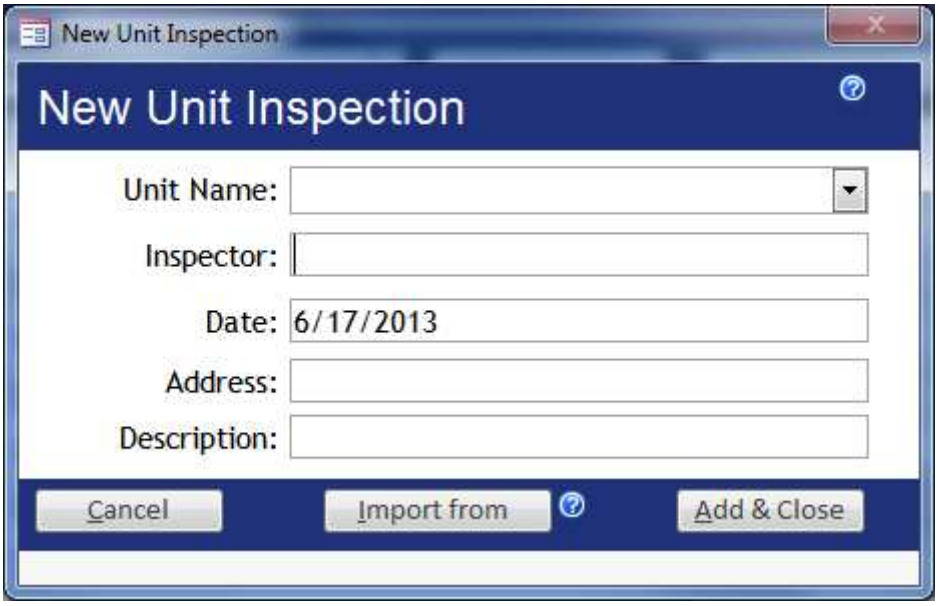
2) Select the Development/AMP that you need to add GPNA data to from the Development/AMPs column of the Control Panel.

3) Continue by selecting the relevant Site, Building Set, Unit Set, and Common Area Set until you locate the component that requires the inspection data.

4) Click the **Inspect** button underneath the selected component to open the Inspection window for that component.

5) Click the **Add Inspection** button at the top of the Inspection screen.

The New Inspection window appears.



6) In the **Inspection Name** field, enter the name of the Building/Unit/Common Area being inspected. For Buildings and Units, select the name from the drop-down menu containing the names in that set.

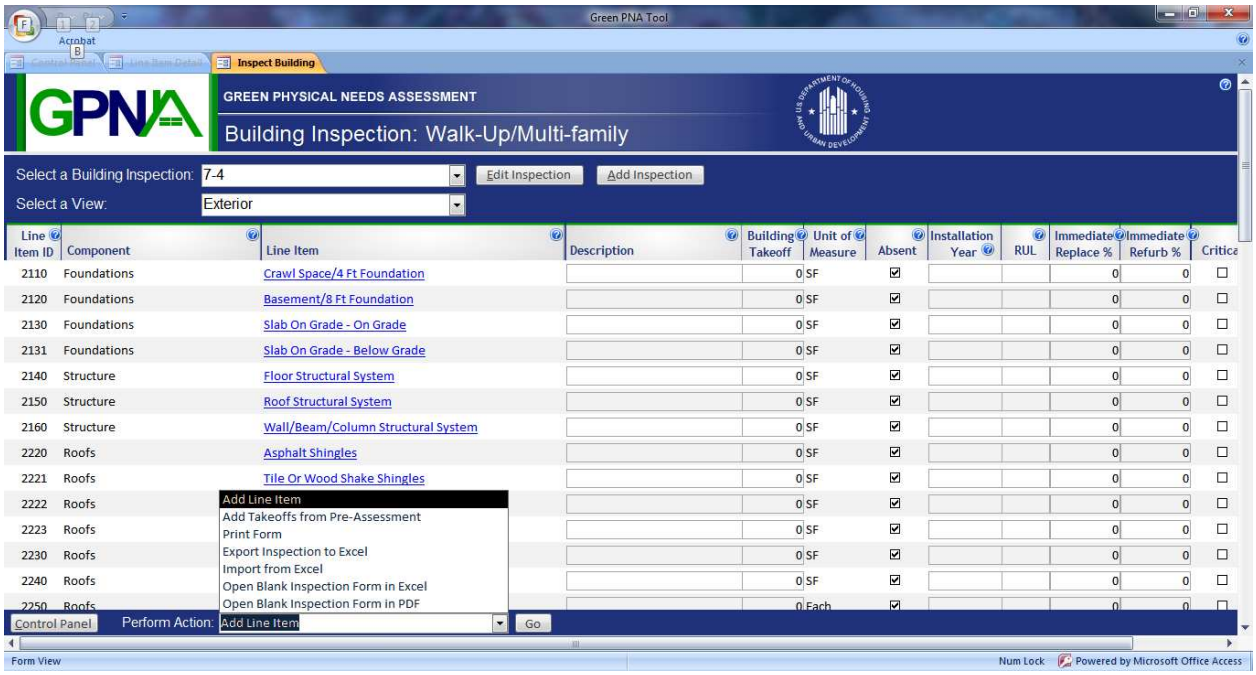
7) Continue to fill out optional fields in this window as needed, adding inspectors names, followed by inspection addresses and description

8) Click the **Add & Close** button when you are finished.

The Inspection screen updates with a blank inspection page and a newly-created inspection is listed in the **Select an Inspection** section.

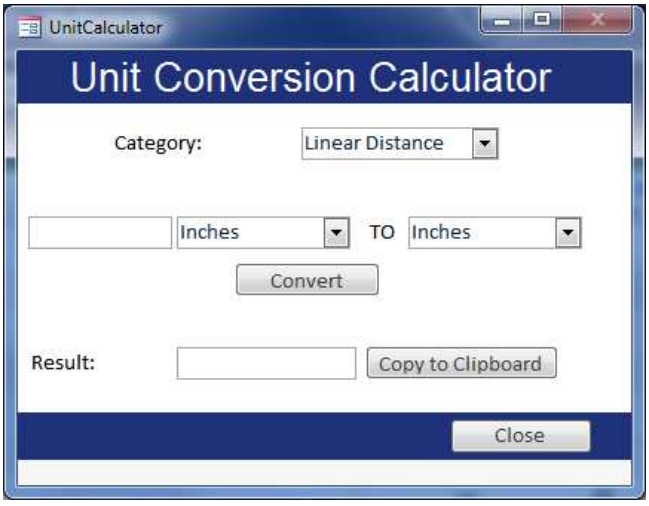
Note: For Building Inspections, you also need to select if you are entering inspection data for the Exterior or Systems of the building. To do this, select either **Exterior** or **Systems** from the **Select a View** drop-down menu that appears on the Building Inspection screen

9) Enter data into the line items and fields in the Inspection screen as appropriate. THE CRITICAL ENTRIES ON EACH APPLICABLE COMPONENT LINE OF THE INSPECTION FORMS ARE THE QUANTITY AND THE REMAINING USEFUL LIFE (RUL).



To more easily enter data, remember the following:

- Click on the **Info** button at the end of each row to open up a Line Item Definition window for a specific line item. This window displays detailed information on the line item and the fields not included on the inspection form.
- Click on the **Perform Action** drop-down at the bottom of the Inspection screen to display a menu item of additional actions you can perform for the Inspection form such as adding and copying line items, opening forms in Excel and PDF formats, and printing forms.
- Click on the **Unit Conversion Calculator** button in the top-right corner of the screen to launch a calculator that will help you convert basic distance, area, energy usage, and liquid volume measurements. (On smaller screens, you'll have to scroll to the right to see the unit conversion calculator).



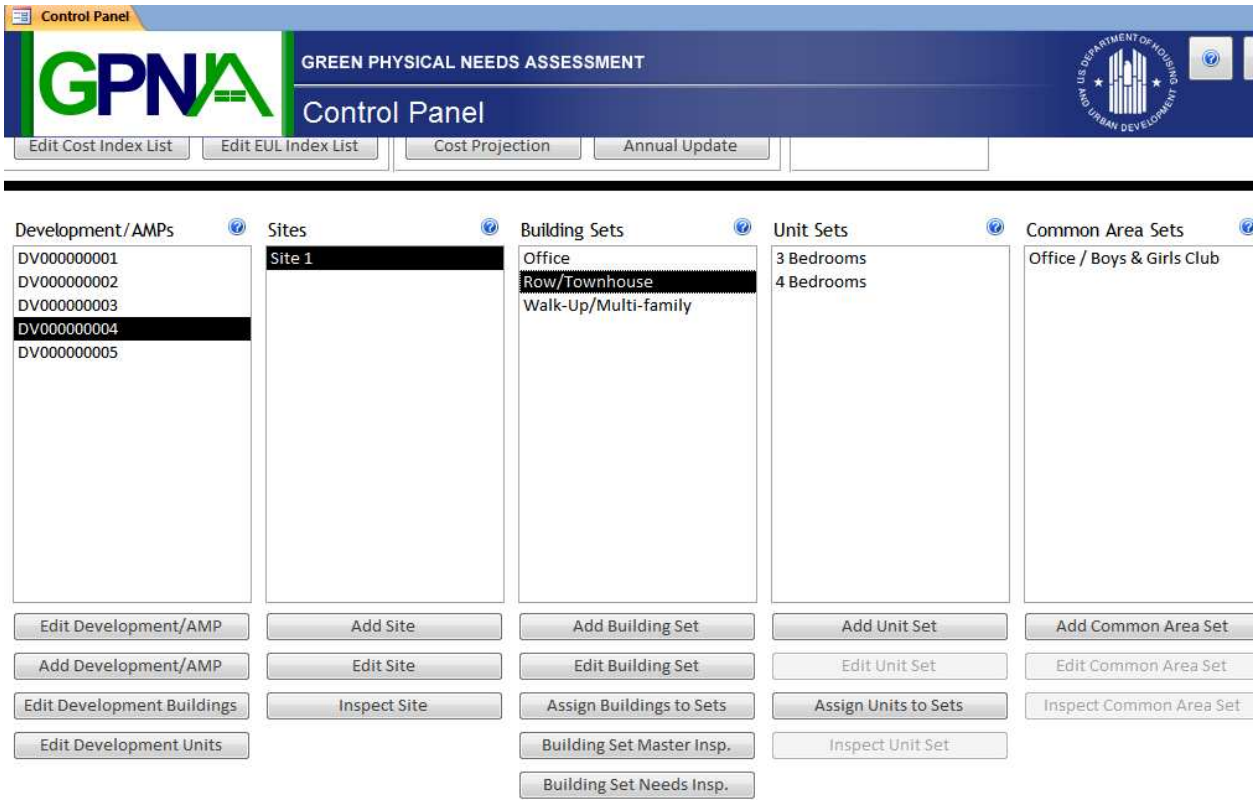
The GPNA tool automatically disallows some replacement and/or refurbishment options for some line items based on applicability or established effectivness.

Enter Data for Building Set Master Inspection and Set Needs Inspections

. For circumstances where a property may have a very large number of inspections, the Master Inspection form process may be used to somewhat streamline the process. This function creates a template inspection form with pre-populated quantities so that the assessor need only enter the RUL for each appropriate component line.

To enter set master inspection and set needs inspection data for building and unit sets:

1. Select the relevant baseline building or unit set from the Control Panel.
2. On the Edit set page select “use master inspection” at the lower right of the page
3. This selection opens a new box on the control panel “Set master inspection which opens a page for entry on appropriate quantities
4. Once the form is created each Set Needs inspection form that is opened will be pre-populated with all of the appropriate component quantities.


Control Panel
GPNA
GREEN PHYSICAL NEEDS ASSESSMENT
Control Panel
Edit Cost Index List
Edit EUL Index List
Cost Projection
Annual Update
Development/AMPs
DV000000001
DV000000002
DV000000003
DV000000004
DV000000005
Sites
Site 1
Building Sets
Office
Row/Townhouse
Walk-Up/Multi-family
Unit Sets
3 Bedrooms
4 Bedrooms
Common Area Sets
Office / Boys & Girls Club
Edit Development/AMP
Add Development/AMP
Edit Development Buildings
Edit Development Units
Add Site
Edit Site
Inspect Site
Add Building Set
Edit Building Set
Assign Buildings to Sets
Building Set Master Insp.
Building Set Needs Insp.
Add Unit Set
Edit Unit Set
Assign Units to Sets
Inspect Unit Set
Add Common Area Set
Edit Common Area Set
Inspect Common Area Set

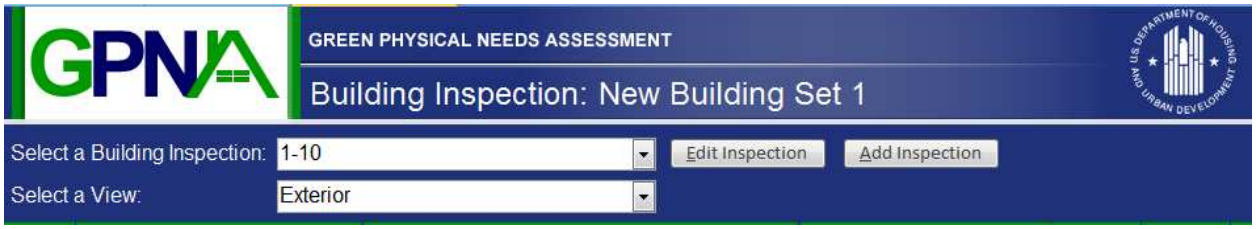
Import a New Inspection in Excel Format

You can import a new inspection in Excel format as long as the inspection is already in the correct GPNA Excel format. The original Excel Inspection file was created by export in Phase 2: Assessment – Conducting the GPNA, and the only change to that Excel file is entry of inspection data.

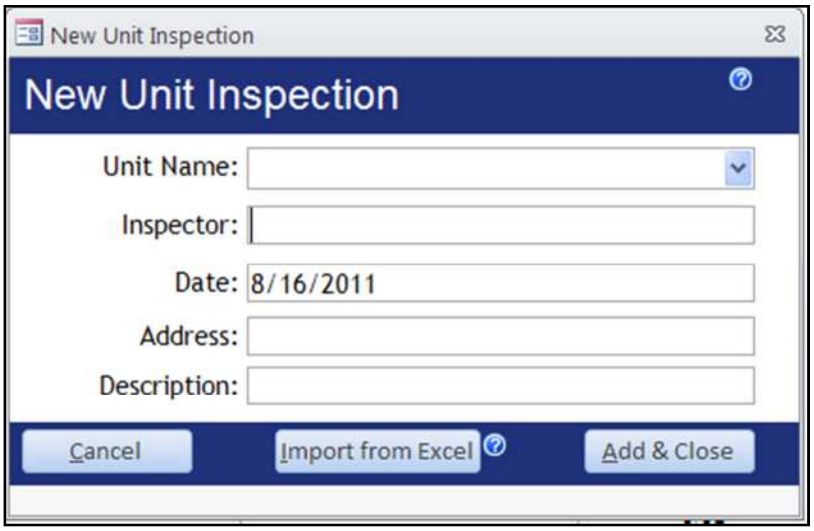
Note: To see the correct GPNA Excel format, select **Open Blank Inspection Form in Excel** from the Perform Action drop-down on the Inspection screen and click **Go**.

To import a new inspection in Excel file format:

1) Click the **Add Inspection** button at the top of the Inspection screen.



The New Inspection window appears.



2) Click the **Import from Excel** button.

3) When the Browser window appears, navigate to your Excel file located on your PC, highlight it, and click the **OK** button.

4) Click the **Save** button when the Confirm Load pop-up window appears.

Note: If the file is not properly saved, the system alerts the user by displaying a red message under the Status. Verify the inspection form matches the GPNA tool selected inspection. You cannot add fields to or delete fields from the Excel inspection form, nor can you use the Excel file to generate other inspection forms – in these cases the GPNA tool will not import the new or modified Excel files.

Edit a Current Inspection

To edit a current inspection:

1) From the Control Panel, select the Physical Needs Assessment that contains the relevant components by clicking the **Select a Physical Needs Assessment** drop-down and selecting the appropriate GPNA from the list.

2) Select the Development/AMP that you need to add GPNA data to from the Development/AMPs column of the Control Panel.

3) Continue by selecting the relevant Site, Building Set, Unit Set, or Common Area Set depending on the component that requires the inspection data.

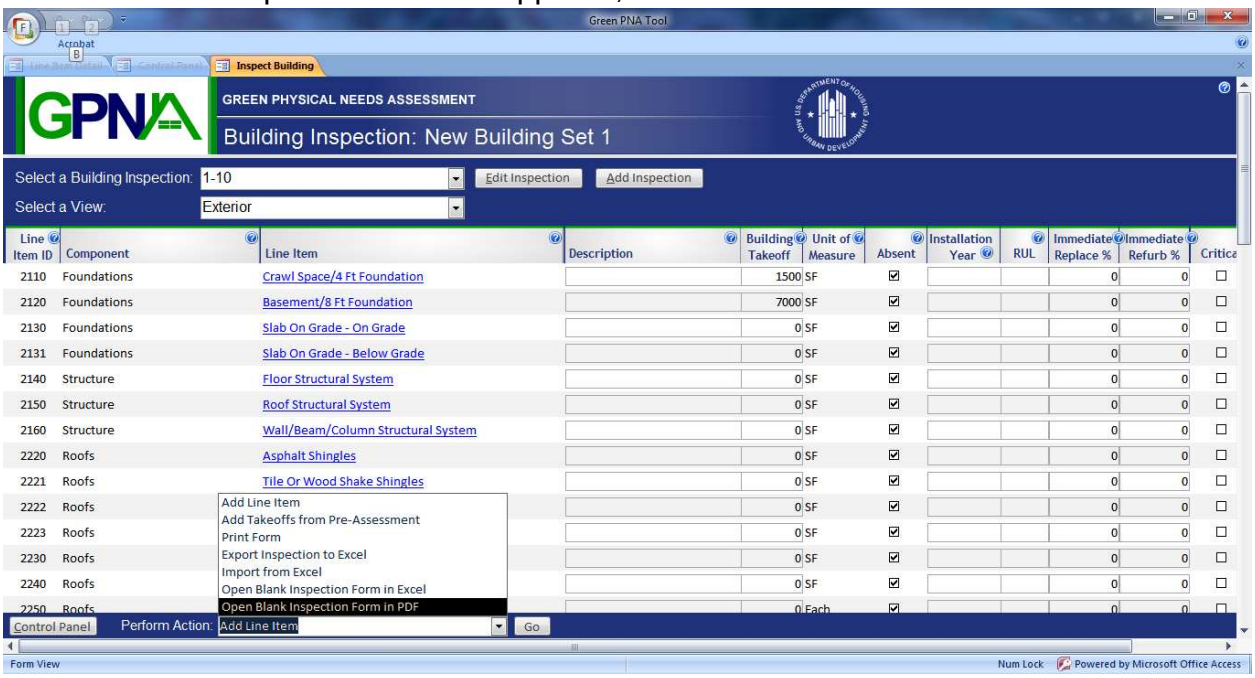
4) Click the **Inspect** button underneath the selected component to open the Inspection window for that component.

5) From the Inspection screen, choose an inspection to edit from the **Select an Inspection** drop-down menu.

Note: For Building Inspections, inspection data is entered for both Building Exterior and Building System components. To edit inspection data for either Building Exterior or Building System components, select either **Exterior** or **Systems** from the Select a View drop-down menu that appears on the Building Inspection screen.

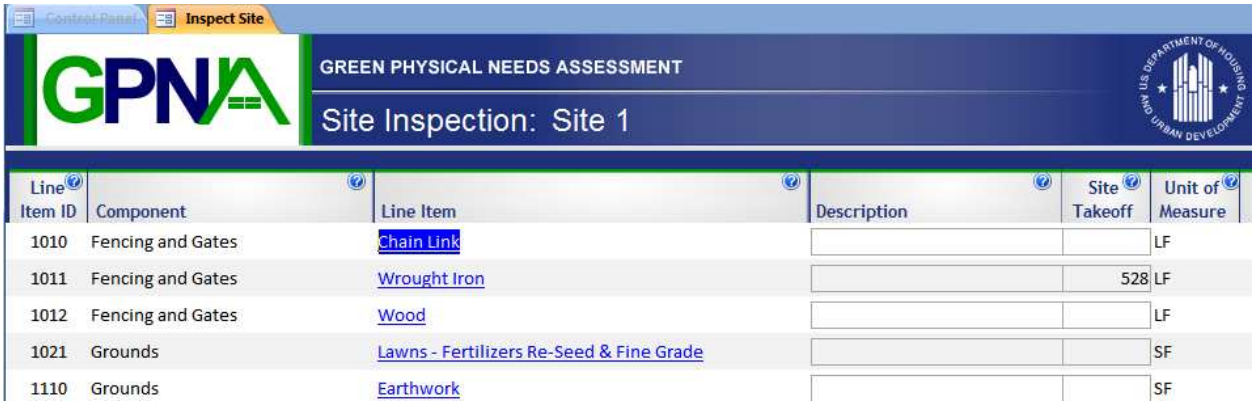
6) Click the **Edit Inspection** button at the top of the screen.

7) When the Edit Inspection window appears, review and edit the fields as needed.



To attach a photo to a Line Item,

1) Start in the Control Panel
2) Select a Development/AMP from the Development/AMPs column,
3) Select a Site from the Sites column
4) Select Inspect Site and the Site Inspection screen will appear:

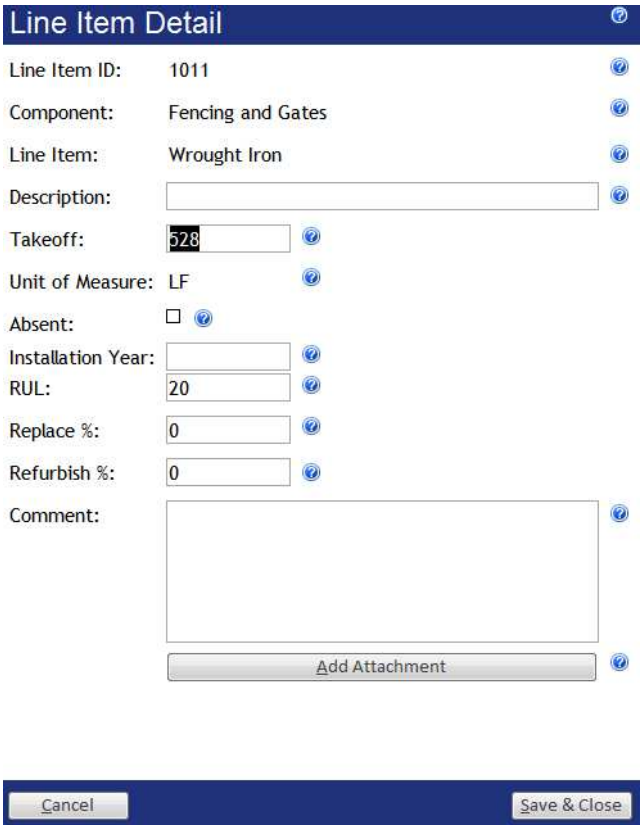


Line Item ID	Component	Line Item	Description	Site Takeoff	Unit of Measure
1010	Fencing and Gates	Chain Link			LF
1011	Fencing and Gates	Wrought Iron		528	LF
1012	Fencing and Gates	Wood			LF
1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade			SF
1110	Grounds	Earthwork			SF

5) Click on the desired blue highlighted Line Item from the Line Item column, and the Line Item Detail screen will appear.

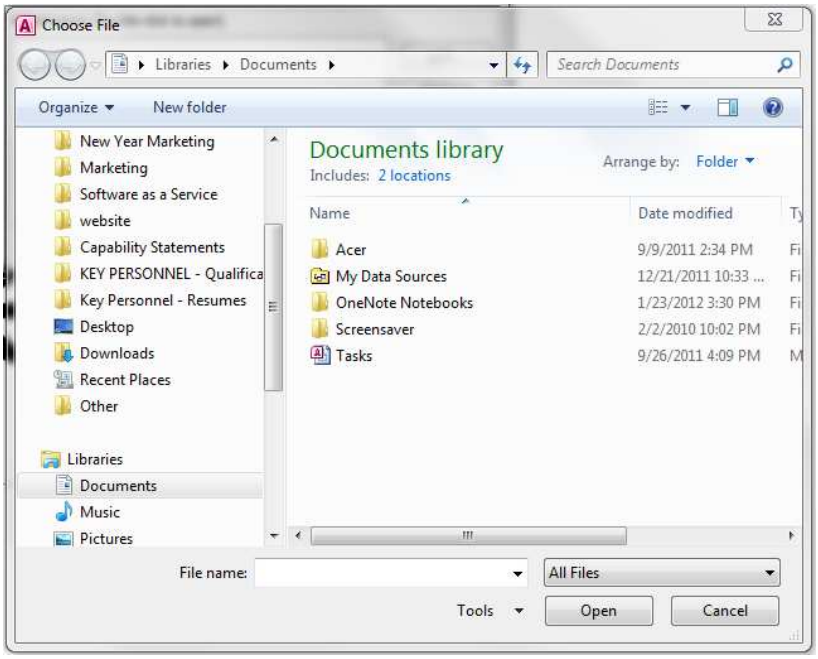
   Note: The description field contains room for a short description. Please use the comments field for longer comments. The reports tool has a report that you can generate to show all descriptions and comments.

6) Select the attachments button located in the Comments Box.
7) Right-click inside the Attachment box, then Select Manage Attachments. The attachment window will appear.



8) Click on Add, and the Choose File pop-up window will appear.

9) Browse your local computer for the JPEG file and select Open to attach the photo to the selected Line Item.



Delete an Inspection

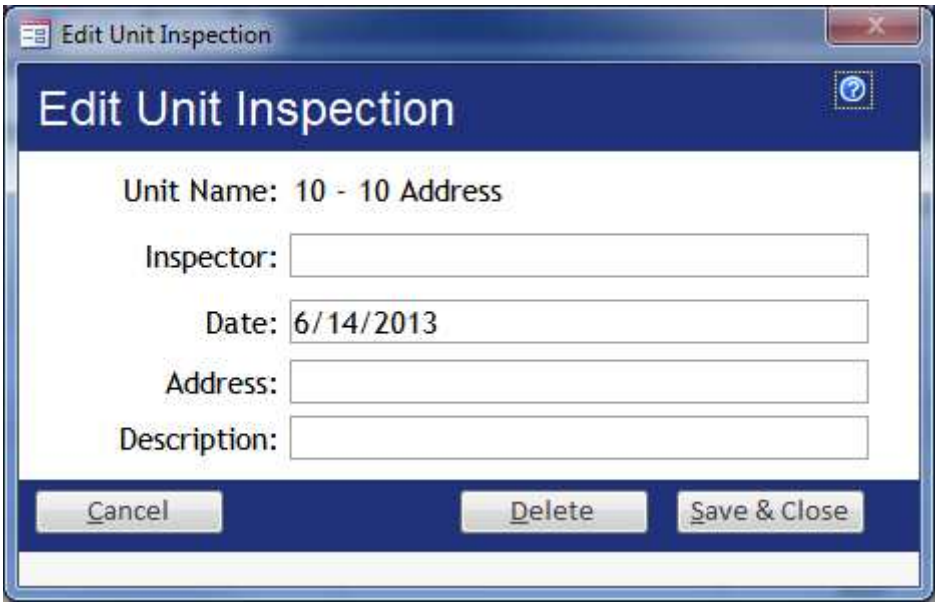
You can delete an inspection record at any time. However, once the record is deleted this action cannot be undone or restored. If there is a chance you may wish to restore it later, you can export and save a copy before deleting it.

To delete an inspection:

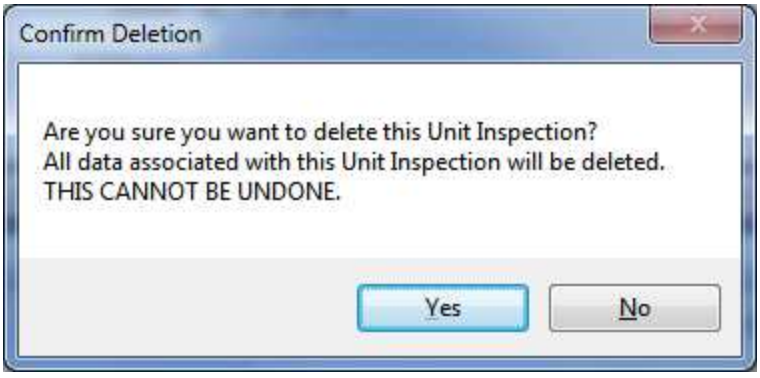
1) From the Inspection screen, choose an inspection from the **Select Inspection** drop-down menu.

2) Click the **Edit Inspection** button at the top of the screen.

3) When the Edit Inspection window appears, click the **Delete** button to remove this inspection.



4) When the Confirm Deletion window appears, click the **Yes** button. This cannot be undone.



Enter GPNA Data into an Inspection

To enter GPNA data in an inspection:

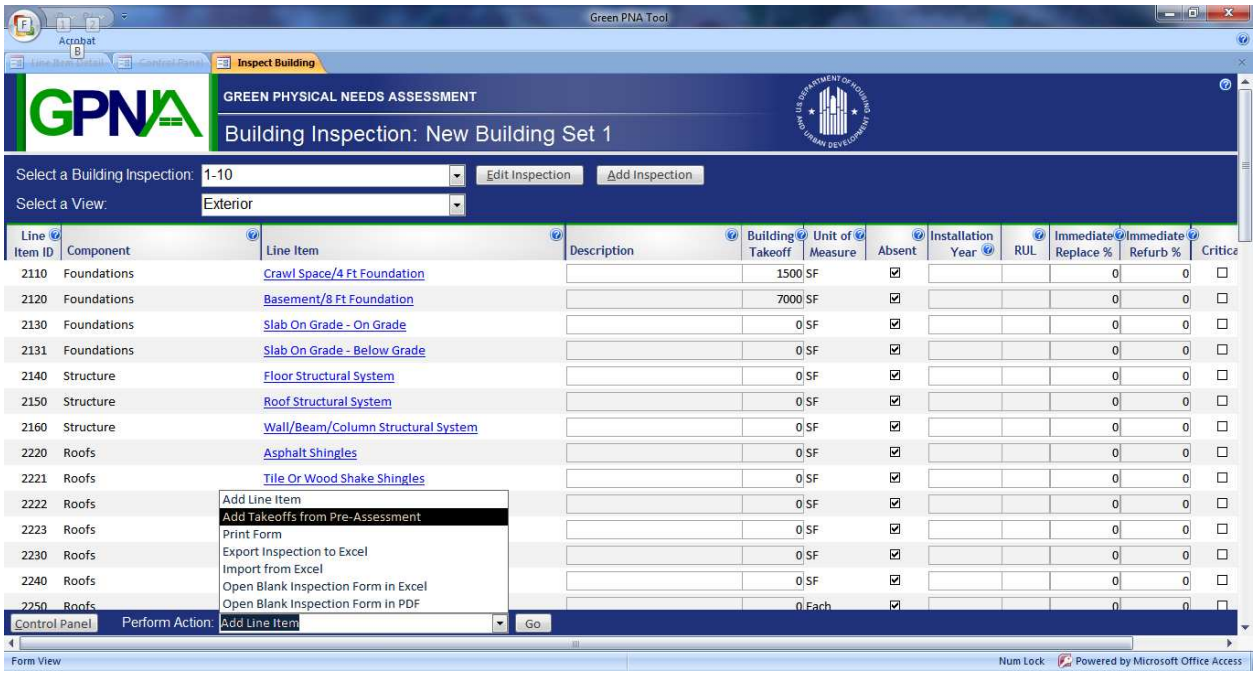
1) From the Control Panel, choose your PNA. Then select the Development/AMP from the Development/AMPs column of the Control Panel.

2) Continue by selecting the relevant Site, Building Set, Unit Set, and Common Area Set until you locate the component that requires the inspection data.

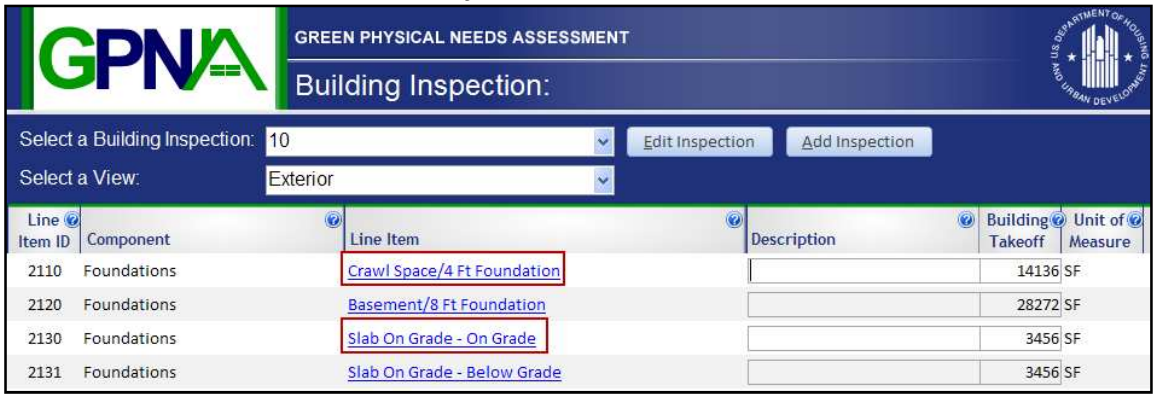
3) Click the **Inspect** button underneath the selected component to open the Inspection window for that component.

4) Choose an inspection from the **Select Inspection** drop-down menu.

5) If you have been entering quantity data in the set creation stages, click the **Perform Action** drop-down menu, select **Add Takeoffs from Pre-Assessment** and click the **Go** button.



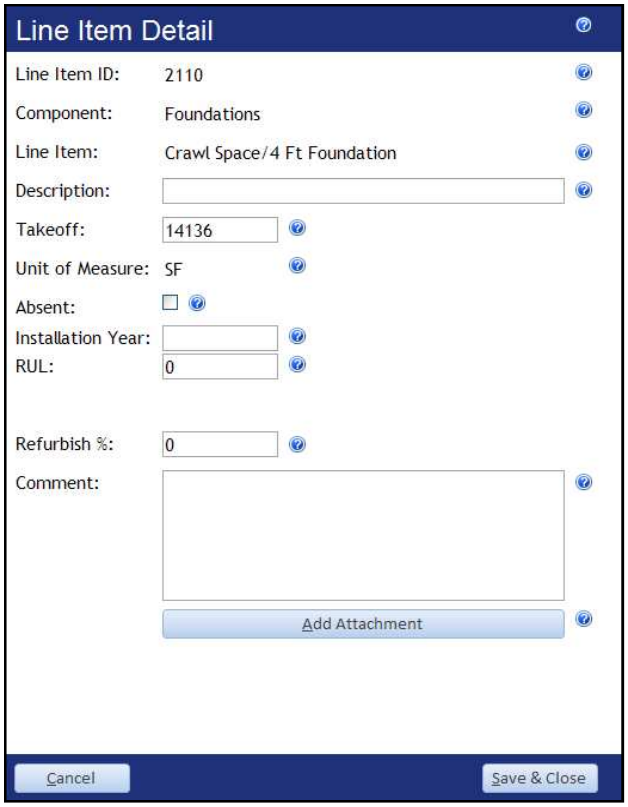
6) Click on each Line Item for which you want to enter data.



The Line Item Detail window appears.

Review and update the following fields as appropriate:

- **Description:** Enter a description of the line item. This field is optional.
- **Takeoff:** Enter a take-off amount associated with this line item.
- **Installation Year:** Enter the year that the line item was installed.
- **RUL:** Enter the line item's Remaining Useful Life, in years.



Note: The RUL must be entered. If there is no RUL, the tool will be unable to calculate a projection. If a RUL is entered, then the Installation Year is optional. The RUL takes precedence if both are entered.

- **Replace %:** Enter the percent of the line item that needs to be replaced.
- **Refurbish %:** Enter the percentage of the line item that needs to be re-furbished.
- **Comment:** Enter additional information about the line item.
- **Add Attachment:** Click this button to add an image of the line item.

Note: Either Replacement or Refurbishment fields may be disallowed, depending on the Line Item.

7) Click the **Save & Close** button when you are finished entering data. The GPNA tool automatically saves the GPNA data.

Refining Cost Libraries and Information

After completing the inspections, you may need to make changes to the Master Cost Library or individual Development/AMP Cost Libraries. Such changes could include adding line items and updating the EUL index. For example, you may have discovered a component during the inspection phase that was not included when you set up the master cost libraries. Set-up and basic instructions for the Master Cost Library are included under Phase 1: Pre-Assessment – Preparing for the GPNA, and you may need to reference those instructions as well as the advanced instructions below.

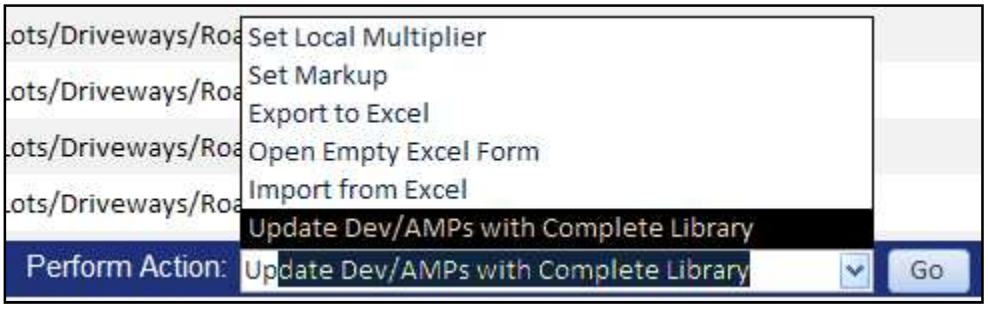
Update Dev/AMPs with the Complete Master Cost Library

Changes and updates may be made to either the Master Cost Library or individual Development/AMP Cost libraries. To edit or update several Development/AMP cost libraries simultaneously, first make edits to the Master Cost library and then select the "Update /dev/Amps " function at the end of the row for each component to transfer the Master Cost library information to each of the AMPs' cost library.

To update the Dev/AMPs with the complete Master Cost Library:

1) Click the **Master Cost Library** button from the Control Panel to display the Master Cost Library for GPNA window.

2) Click the **Perform Action** drop-down menu at the bottom of the screen, then select **Update Dev/AMPs with Complete Library** and click the **Go** button.

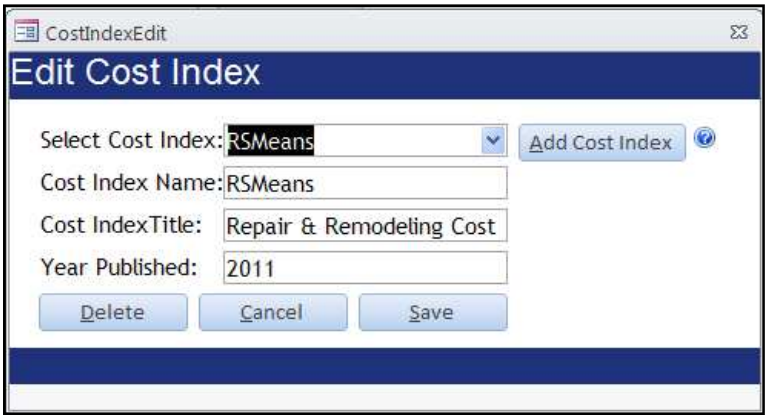


3) When the "**Update all libraries?**" window appears, click **Yes** to overwrite all copies of all line items for all Projects in your PNA or click **No** to cancel. Note that all customized entries in Dev/Amp Cost Libraries will be overwritten.

Edit the Cost Index

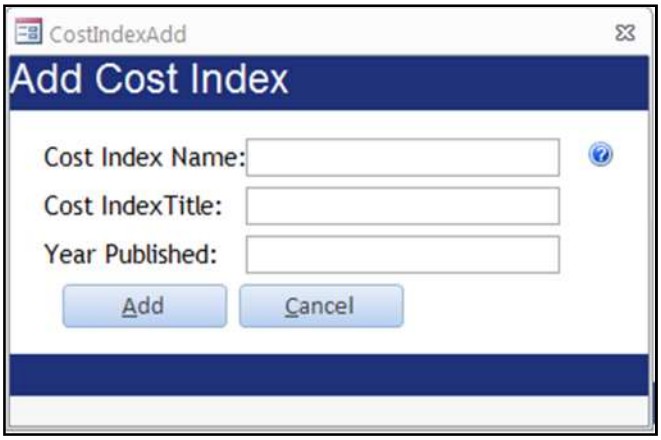
This function records the baseline Cost index used for the GPNA for future ref-

erence. To edit the Cost Index:



1) Starting in the **Control Panel**, select **Edit Cost Index List** from the Master Cost Library section, located in the top-left corner. The "**Edit Cost Index"** window will open.
2) Select the Cost Index you want to edit from the **Select Cost Index** drop-down menu and edit the fields in this window as necessary.
3) When you are finished, click the **Save** button. If you wish to remove the cost index that is currently displaying in the Edit Cost Index window, click the **Delete** button.

If the Cost Index you want to edit is not in the drop-down menu:



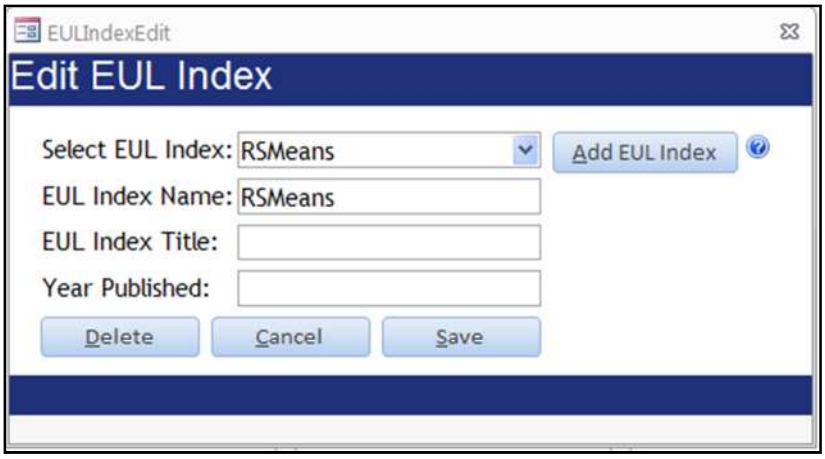
1) Click the **Add Cost Index** button.
2) When the Add Cost Index button appears, fill out the **Name**, **Title**, and **Year Published** fields, and click the **Add** button. The new Cost Index now appears in the **Select Cost Index** drop-down of the Edit Cost Index window.

Edit the EUL Index

To edit the EUL Index:

1) From the Master Line Item section of the Control Panel, click the **Edit EUL Index List** button.

The Edit EUL Index window will appear.



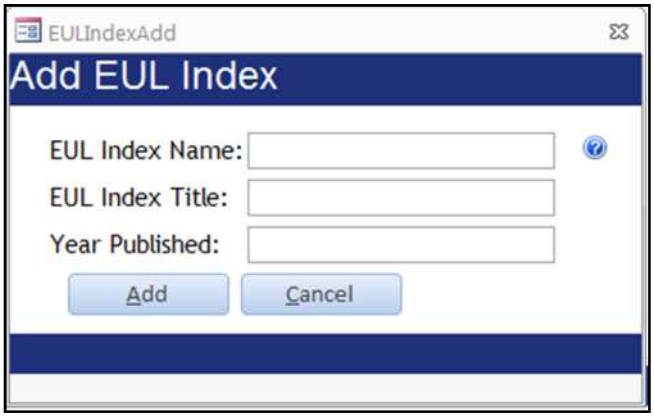
2) Select the EUL Index you want to edit from the **Select EUL Index** drop-down menu and edit the fields in this window as necessary.

3) When you are finished, click the **Save** button. If you wish to remove the cost index that is currently displayed in the Edit EUL Index window, click the **Delete** button.

4) If the EUL Index you want to edit is not in the drop-down for this field:

a) Click the **Add EUL Index** button.

b) When the Add EUL Index button appears, fill out the **Name**, **Title**, and **Year Published** fields, and click the **Add** button. The new EUL Index now appears in the **Select EUL Index** drop-down menu of the Edit EUL Index window.

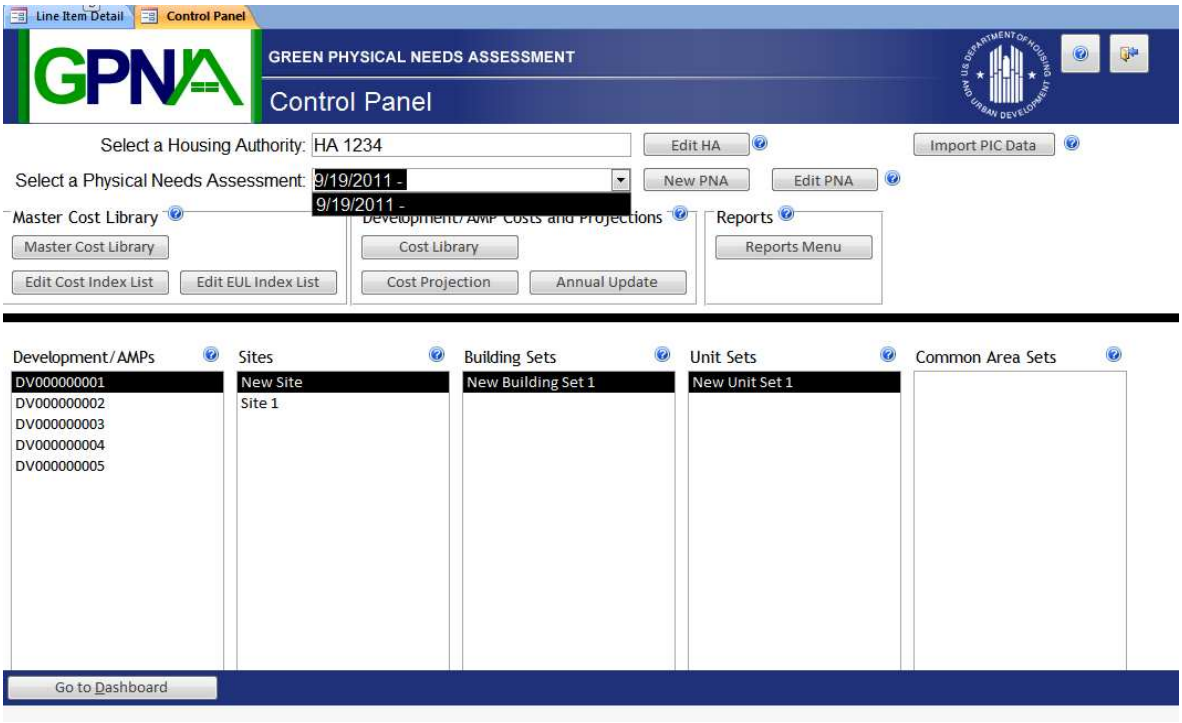


Edit Costs and Estimated Useful Life (EUL)

Changes made to the Cost Library only affect the Development/AMP selected from the Control Panel.

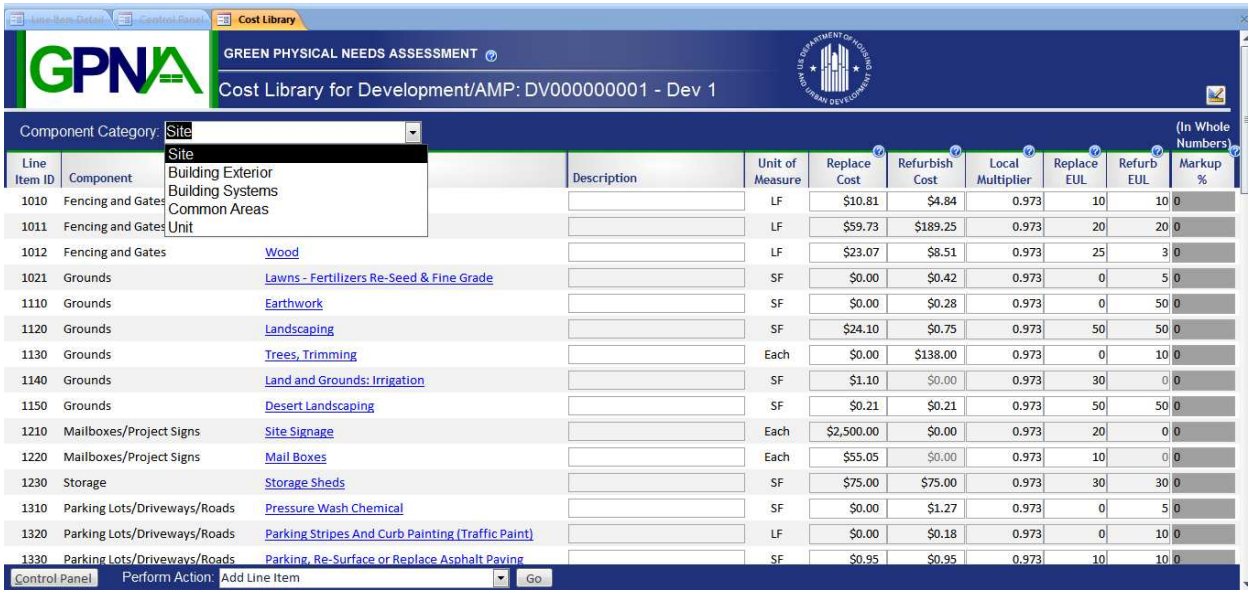
To adjust line item costs and EUL values:

1) From the Control Panel, select a GPNA from the **Select a Physical Needs Assessment** list.

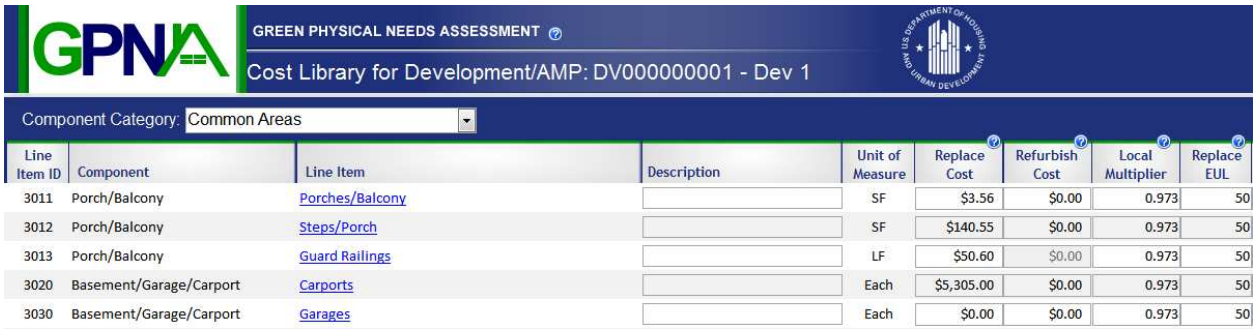


2) First select a Development/AMP from the **Development/AMPs** column, and then click the **Cost Library** button located on the right side of the screen.

3) When the Cost Library screen opens, select a component from the **Component Category** drop-down menu. The line items for the selected component will appear.

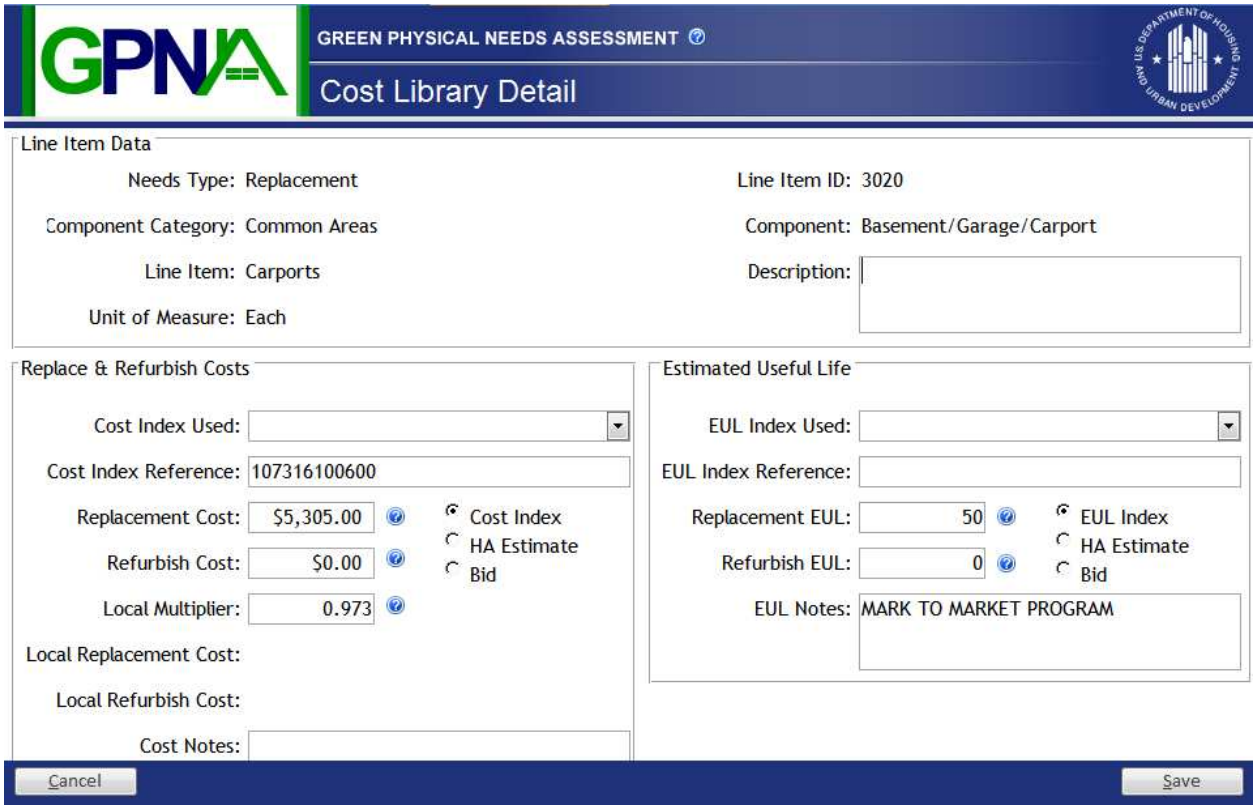


4) To adjust costs and Estimated Useful life values for a specific Line Item, select a Line Item from the **Line Item** column.



Line Item ID	Component	Line Item	Description	Unit of Measure	Replace Cost	Refurbish Cost	Local Multiplier	Replace EUL
3011	Porch/Balcony	Porches/Balcony		SF	$3.56	$0.00	0.973	50
3012	Porch/Balcony	Steps/Porch		SF	$140.55	$0.00	0.973	50
3013	Porch/Balcony	Guard Railings		LF	$50.60	$0.00	0.973	50
3020	Basement/Garage/Carport	Carports		Each	$5,305.00	$0.00	0.973	50
3030	Basement/Garage/Carport	Garages		Each	$0.00	$0.00	0.973	50

The Cost Library Detail screen will appear.



5) In the **Line Item Data** section of the Cost Library Detail screen, enter a brief summary of the Line Item.

6) In the **Replace & Refurbish Costs** section of the Cost Library Detail screen, select the type of estimate for the item:

- **Cost Index:** Costs are determined from an industry standard Cost Index such as RS Means.
- **HA Estimate:** Costs are estimated by the Housing Authority.
- **Bid:** Cost estimates are from a vendor.

Note: The GPNA tool automatically disallows some refurbishment and/or replacement fields for various line items based on applicability and/or eligibility. Accordingly, some items may not have all replacement or refurbishment options available.

7) To determine costs from a Cost Index, select the **Cost Index Used** button and edit the **Local Multiplier.**

   - **Local Multiplier**: The ratio of the average national cost and the cost of the item in the area of the Development/AMP location. Most cost indexes provide this value. Of course if you are using local cost based on actual experience your multiplier would be 1.

8) In the **Replace & Refurbish Costs** section of the Cost Library Detail screen, enter the **Cost Index Reference**, **Replacement Cost**, **Refurbish Cost**, and Cost Notes.

   - **Cost Index Reference:** The unique ID or reference found in the Cost Index for this specific item.
   - **Replacement Cost (REQUIRED FIELD):** The estimated cost to replace one unit of measure for the line item.
   - **Refurbish Cost:** The estimated cost to repair or refurbish one unit of measure for the line item.

9) In the **Estimated Useful Life** section of the Cost Library Detail screen, select the type of estimate for the item:

   - **EUL Index:** EUL is based on an industry standard EUL Index such as RS Means.
   - **HA Estimate:** EUL is estimated by the Housing Authority.
   - **Bid**: EUL estimates supplied by a vendor.

10) In the **Replace & Refurbish Costs** section of the Cost Library Detail screen, enter the **EUL Index Reference**, **Replacement EUL**, **Refurbish EUL**, and **EUL Notes**.

   - **EUL Index Reference:** The unique ID or reference found in the EUL Index for this specific item.
   - **Replacement EUL (REQUIRED FIELD):** The estimated service life of the item after it is replaced.
   - **Refurbish EUL:** The estimated service life of the item after it is refurbished or repaired.

11) Click the **Save & Close** button when you are finished editing relevant fields. The updated cost details and EUL appear on the Cost Library screen for that line item.

12) The following cost details can also be entered or updated directly on the Cost Library screen for each line item:

   - Description
   - Replace Cost
   - Refurbish Cost
   - Local Multiplier
   - Replace EUL
   - Refurb EUL

Add a Line Item to the Cost Library

The Cost Library contains line items from the recorded GPNA inspection data. From the Cost Library screen, new line items can be added.

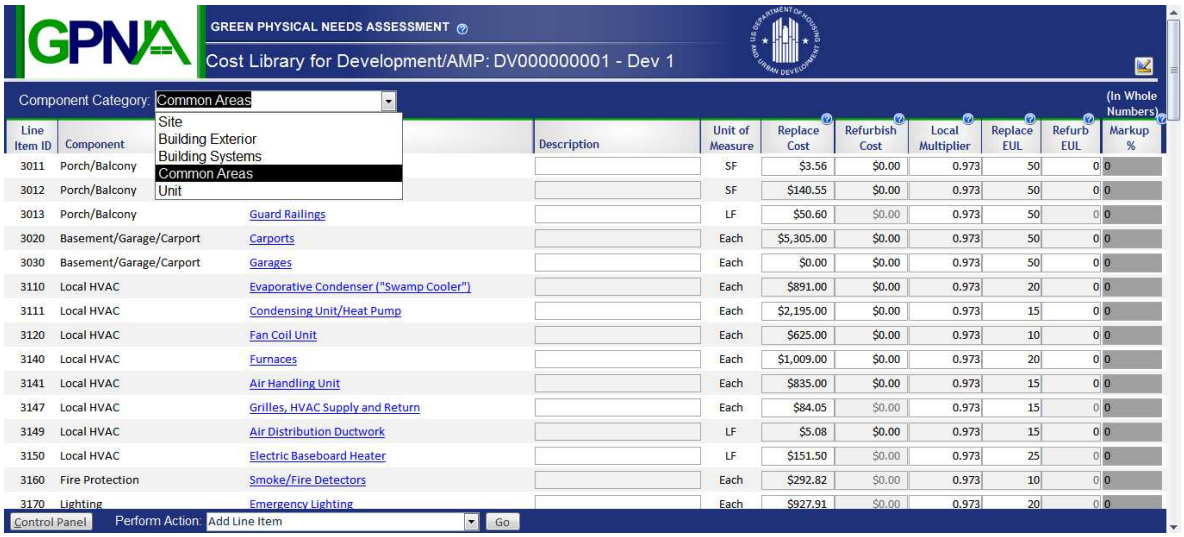
To add a line item:

1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.

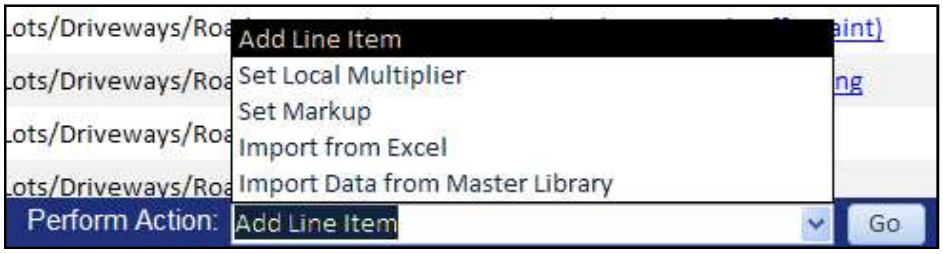
2) Select a Development/AMP from the **Developments/AMPs** column.

3) Click the **Cost Library** button in the Development/AMP Costs and Projections section of the Control Panel screen.

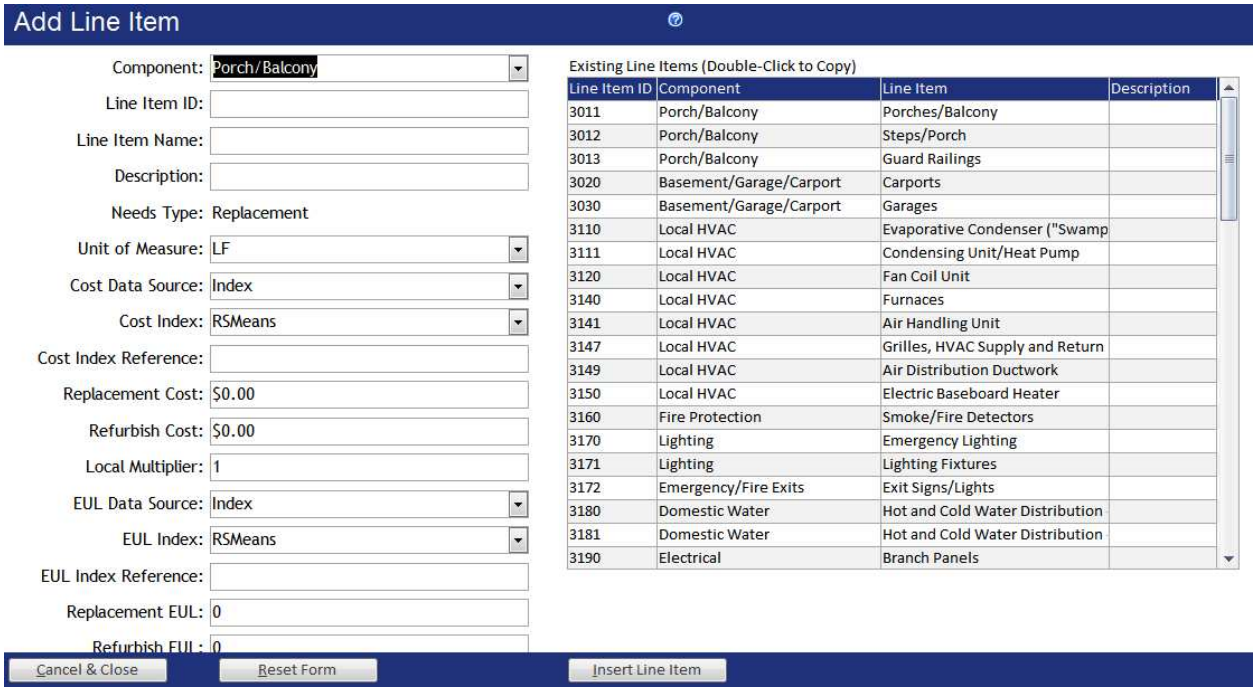
4) When the Cost Library screen opens, select a component from the **Component Category** drop-down menu. The line items for the selected component will appear.



5) To add a new line item, select **Add Line Item** from the **Perform Action** drop-down menu and click the **Go** button.



The Add Line Item screen will appear.



Note: You can double-click on an existing line item on the right of the Add Line Item screen to copy an existing Line Item's details to the new Line Item.

6) Select the type of Component from the **Component** drop-down menu or click the **New Component** button to enter the name of a new component.

7) Complete the **Line Item ID**, **Line Item Name**, and **Description** fields.

8) Select the units from the **Unit of Measure** drop-down menu.

9) Select the **Cost Data Source** and **Cost Index** standards used to estimate the cost.

10) Enter the **Cost Index Reference**, **Replacement Cost**, **Refurbishment Cost**, and **Local Multiplier**.

11) Select the **EUL Data Source** and **EUL Index** standards used to estimate the useful life.

12) Enter the **EUL Index Reference**, **Replacement EUL**, and **Refurbishment EUL**.

13) When you are finished, click the **Insert Line Item** button at the bottom of the window to add the item to the Cost Library.

Note: To clear and reset the data entered on the Add Line Item screen, click the **Reset Form** button.

Set the Default Local Multipliers

Each line item in the Cost Library can have its own associated local multiplier.

The Local Multiplier represents the ratio of the generic or average national cost to the local cost of a line-item. This ratio allows for the adjustment of cost estimates based on different price regions and provides for more accurate cost projections.

If many components or items are available in the same region or location, then you can set one Local Multiplier as the default value, which is then stored for every line item of the Development/AMP. You can then adjust any applicable individual lines for example if you have an actual local cost for an item based on experience you would enter 1 for the multiplier for that item.

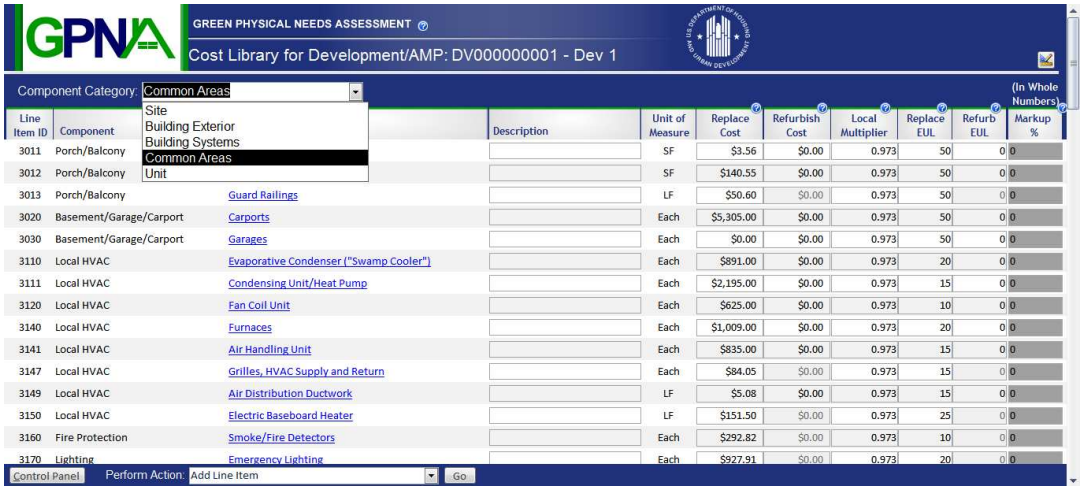
To set the Default Local Multiplier for all line items of a Development/AMP:

1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.

2) Select a Development/AMP from the **Developments/AMPs** column.

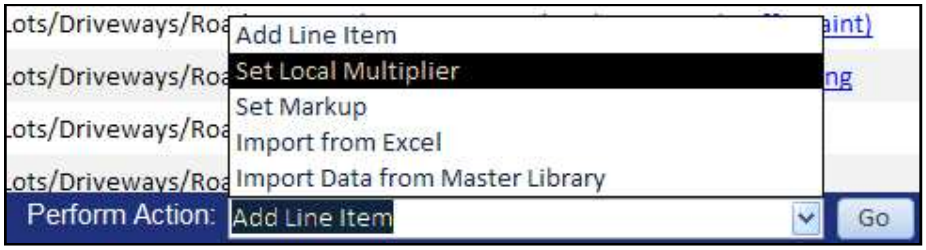
3) Click the **Cost Library** button in the Development/AMP Costs and Projections section of the Control Panel screen.

4) When the Cost Library screen opens, select a component from the **Component Category** drop-down menu. The line items for the selected component will appear.

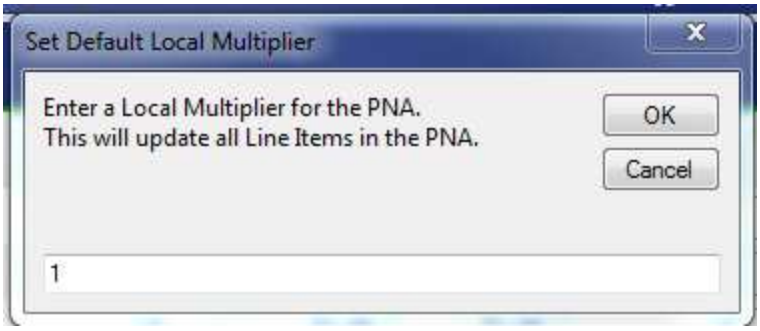


To set the default Local Multiplier value:

1) Select **Set Local Multiplier** from the **Perform Action** drop-down menu, click the **Go** button.



The Set Default Local Multiplier window appears.



2) Enter the Local Multiplier value.

3) Click the **OK** button.

A default value has now been set for all Local Multipliers.

Set the Markup Value

The Markup Value is a percentage applied to the original cost of the item to account for additional hidden fees. The Markup Value is a default number that is applied to all line items for the selected Development/AMP. If the Markup Value is 20 percent, then each line item cost is decreased by 20 percent.

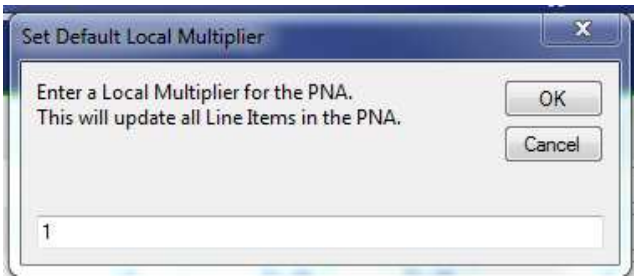
To set the Markup Value:

1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.

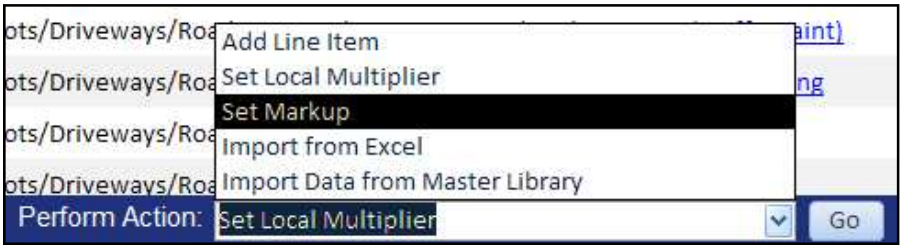
2) Select a Development/AMP from the **Developments/AMPs** column.

3) Click the **Cost Library** button in the Development/AMP Costs and Projections section of the Control Panel screen.

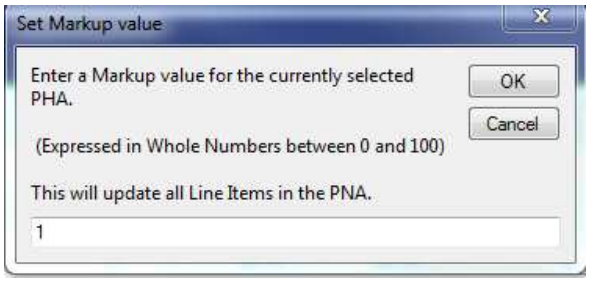
4) When the Cost Library screen opens, select a component from the **Component Category** drop-down menu. The line items for the selected component will appear.



5) Select **Set Markup** from the **Perform Action** drop-down menu, and then click the **Go** button.



6) Enter the markup value in the field and click the **OK** button.



Cost Projection

The Cost Projection function is used in developing a timeline or schedule of estimated future costs based on the recommendations for replacement and refurbishment derived from GPNA observations and entered data. The Cost Projection first calculates a 20 year replacement schedule and costs based upon the four basic required entries the user has made for each component-the cost and EUL entered on the cost library and the quantity and RUL entered on the inspection forms..

The Cost Projection Schedule is fully editable allowing items to be added and existing items to be upgraded in order to address the sustainability, marketability, and accessibility needs of the HA Development/AMP, and then view the cost impact of those new items.

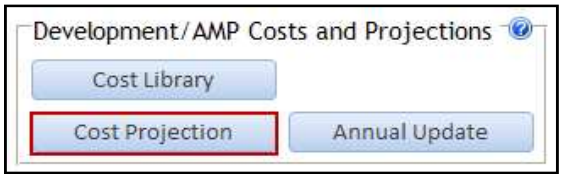
After the Development/AMP needs are evaluated, you can view the cost projections for each item and the total costs for the Development/AMP over a 20 year timeline.

To view the Cost Projection Schedule:

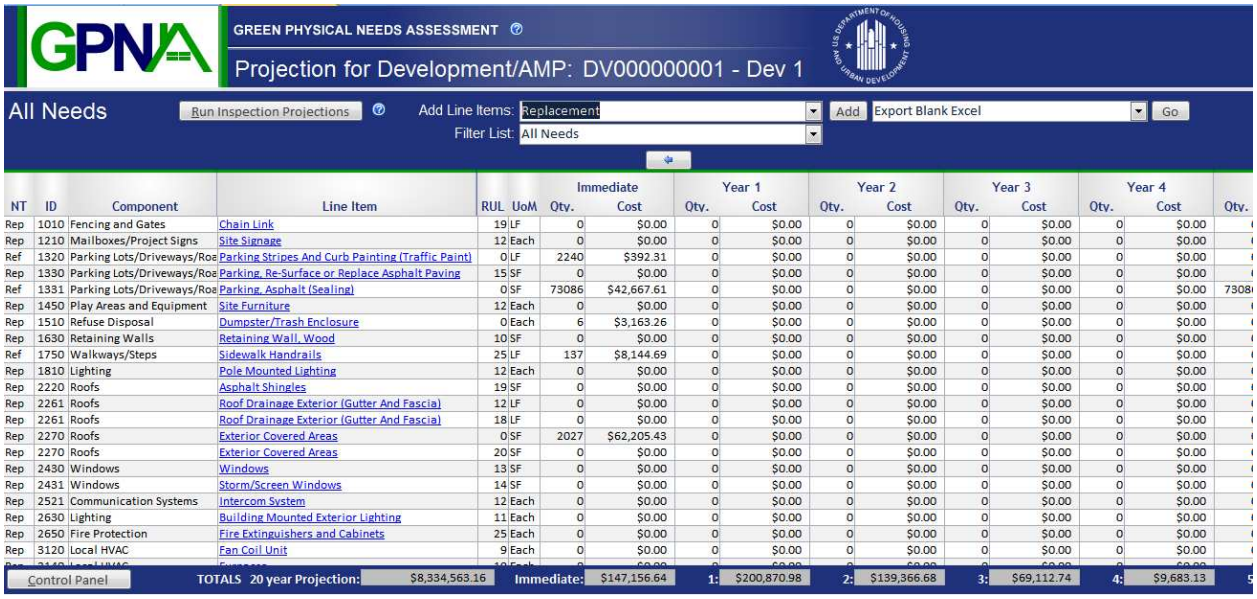
1) Start in the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select desired GPNA from the list.

2) Select a Development/AMP from the Development/AMPs column.

3) Click the **Cost Projection** button.



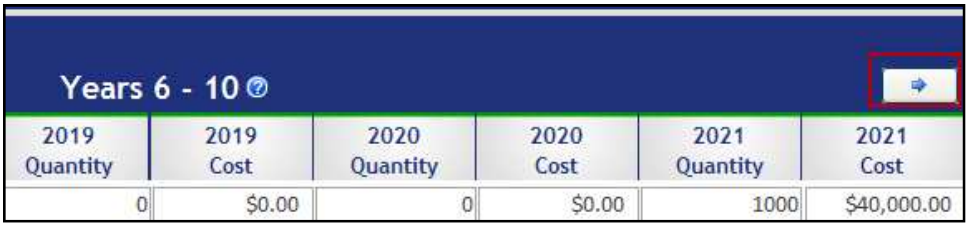
The Projection screen opens to a blank page. When the user selects “run inspection projections” at the upper left of the page, the GPNA tool caluculates and displays Cost Projection data for the selected Development/AMP.



NT	ID	Component	Line Item	RUL	UoM	Immediate Qty.	Immediate Cost	Year 1 Qty.	Year 1 Cost	Year 2 Qty.	Year 2 Cost	Year 3 Qty.	Year 3 Cost	Year 4 Qty.	Year 4 Cost	Qty.
Rep	1010	Fencing and Gates	Chain Link	19	LF	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	1210	Mailboxes/Project Signs	Site Signage	12	Each	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Ref	1320	Parking Lots/Driveways/Roa	Parking Stripes And Curb Painting (Traffic Paint)	0	LF	2240	$392.31	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	1330	Parking Lots/Driveways/Roa	Parking, Re-Surface or Replace Asphalt Paving	15	SF	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Ref	1331	Parking Lots/Driveways/Roa	Parking, Asphalt (Sealing)	0	SF	73086	$42,667.61	0	$0.00	0	$0.00	0	$0.00	0	$0.00	7308
Rep	1450	Play Areas and Equipment	Site Furniture	12	Each	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	1510	Refuse Disposal	Dumpster/Trash Enclosure	0	Each	6	$3,163.26	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	1630	Retaining Walls	Retaining Wall, Wood	10	SF	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Ref	1750	Walkways/Steps	Sidewalk Handrails	25	LF	137	$8,144.69	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	1810	Lighting	Pole Mounted Lighting	12	Each	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	2220	Roofs	Asphalt Shingles	19	SF	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	2261	Roofs	Roof Drainage Exterior (Gutter And Fascia)	12	LF	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	2261	Roofs	Roof Drainage Exterior (Gutter And Fascia)	18	LF	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	2270	Roofs	Exterior Covered Areas	0	SF	2027	$62,205.43	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	2270	Roofs	Exterior Covered Areas	20	SF	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	2430	Windows	Windows	13	SF	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	2431	Windows	Storm/Screen Windows	14	SF	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	2521	Communication Systems	Intercom System	12	Each	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	2630	Lighting	Building Mounted Exterior Lighting	11	Each	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	2650	Fire Protection	Fire Extinguishers and Cabinets	25	Each	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	
Rep	3120	Local HVAC	Fan Coil Unit	9	Each	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	

Note: The Cost Projection Schedule allows you to view item quantities and associated costs projections for 20 years. The default view displays the first 5 years.

To navigate forward or backwards within the 20 year timeframe, click the arrow buttons above the Cost Projection Schedule.



Create or Reset the Development/AMP Cost Projection

This feature allows you to generate projected line items costs for the currently selected project based on both the Inspection and Cost Library data.

If the projection has been generated before, a notification message will appear and ask if you want to recalculate the projected needs for the current project. After the pro-

jected line item costs are inserted/recalculated, a projection report will appear to notify you of the results of the performed action. The projection report is printable and will indicate line items that are missing one or more of the 4 required values to calculate a projection. The projection report will also note proration's that may have been applied to the calculations such as for Non-ACC units. After reviewing the projection report simply click the Close button to continue back to the projection screen with the newly updated data.

To create or reset a cost projection:

1) From the Control Panel, click the **Cost Projection** button under Development/AMP Costs and Projections section of the Control Panel screen.

2) When the Cost Projection screen opens, click the **Run Inspection Projections** button.

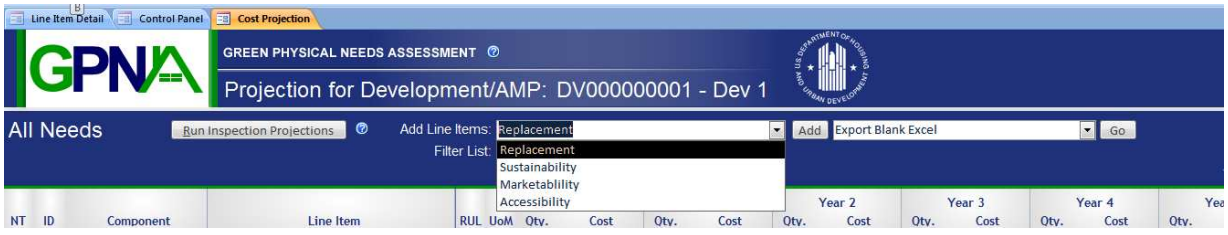
Edit Line Item Quantity and Cost Details on the Cost Projection

You can adjust the quantities for individual line items and edit the cost projection, including cost details, for each individual line item.

To edit line item quantities and costs:

1) From the Control Panel, click the **Cost Projection** button under the Development/AMP Costs and Projections section.

2) When the Cost Projection screen opens, select the type of needs from the **Add Line Items** drop-down menu and click the **Add** button.



3) Adjust the Quantity and Cost for a line item. The fields automatically adjust based on the data you enter.

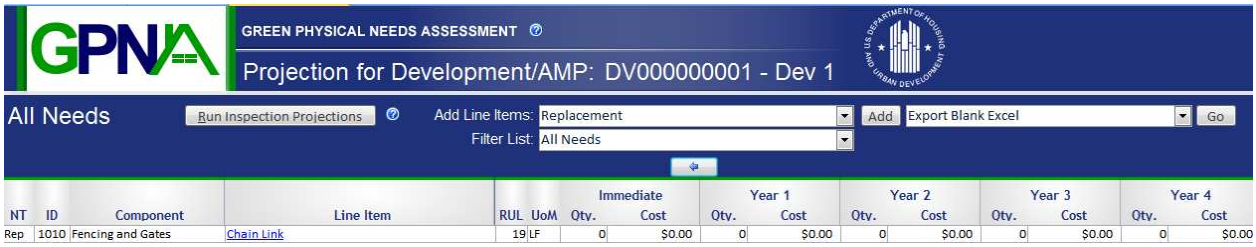
Edit the RUL, EUL, and Costs for a Line Item

You can adjust the RUL, EUL, and associated costs for each line item.

To edit the cost and useful life details for a line item:

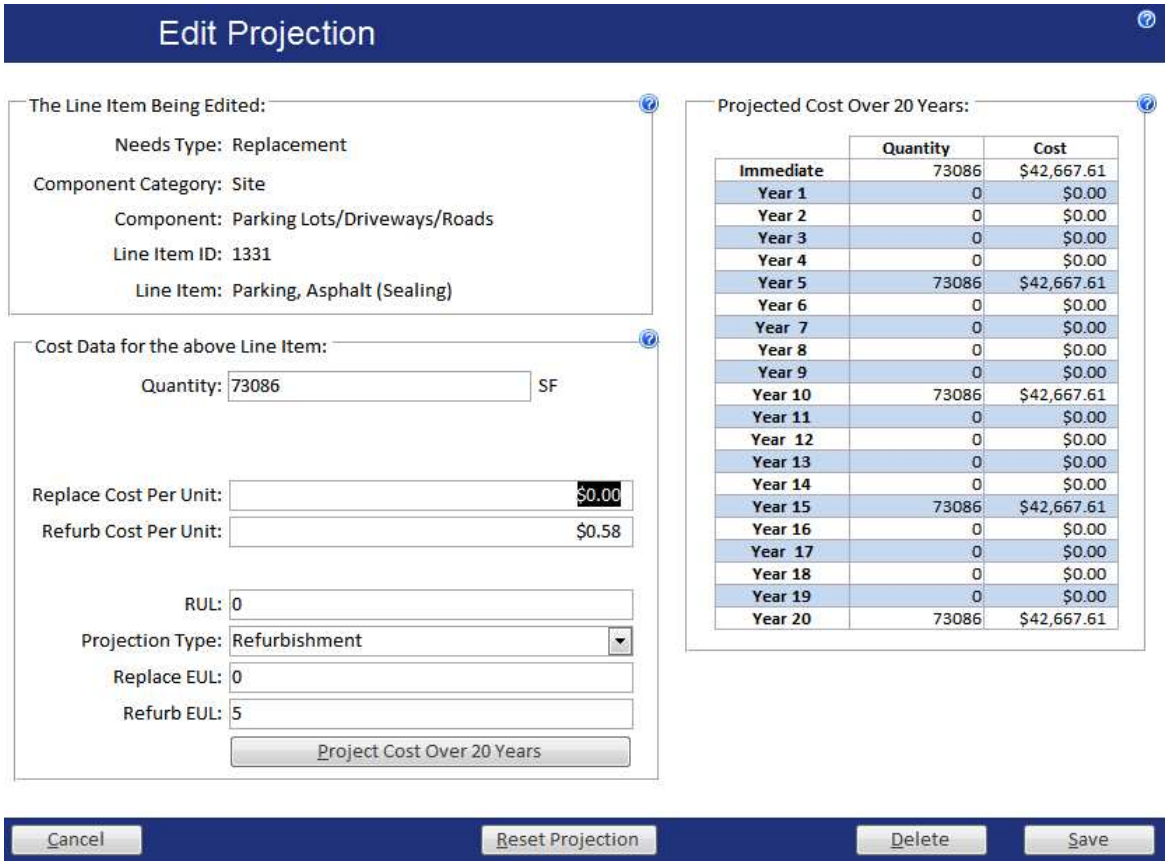
1) Click the **Cost Projection** button under the Development/AMP Costs and Projections section of the Control Panel screen.

2) When the Cost Projection screen opens, select the type of needs from the **Filter List** drop-down menu and click the **Go** button.



3) Click on any of the highlighted line items in the **Line Item column** to adjust the costs for that item.

The **Edit Projection** window will appear.



4) Adjust the appropriate fields. Click the question mark buttons next to a field to view further information about a field/button's functionality.

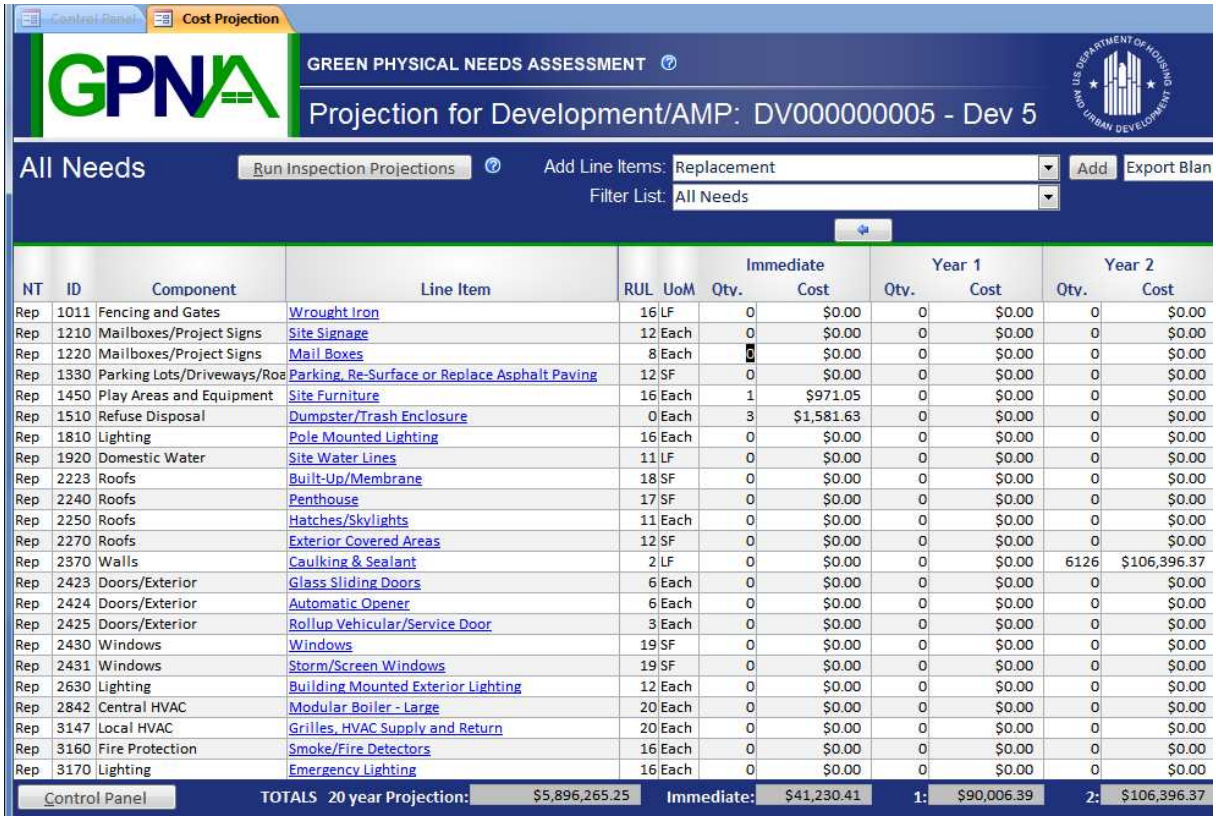
5) To view the Line Item's projected costs, click the **Project Cost Over 20 Years** button.

   The table on the right of the screen updates with the new quantities and costs.

6) Click the **Save** button to update the Line Item on the Cost Projection Schedule.

7) Click the **Delete** button to completely remove the Line Item from the Cost Projection Schedule.

Note: You can also edit the quantity directly on the Cost Projection screen.



NT	ID	Component	Line Item	RUL	UoM	Immediate Qty.	Immediate Cost	Year 1 Qty.	Year 1 Cost	Year 2 Qty.	Year 2 Cost
Rep	1011	Fencing and Gates	Wrought Iron	16	LF	0	$0.00	0	$0.00	0	$0.00
Rep	1210	Mailboxes/Project Signs	Site Signage	12	Each	0	$0.00	0	$0.00	0	$0.00
Rep	1220	Mailboxes/Project Signs	Mail Boxes	8	Each	0	$0.00	0	$0.00	0	$0.00
Rep	1330	Parking Lots/Driveways/Roa	Parking, Re-Surface or Replace Asphalt Paving	12	SF	0	$0.00	0	$0.00	0	$0.00
Rep	1450	Play Areas and Equipment	Site Furniture	16	Each	1	$971.05	0	$0.00	0	$0.00
Rep	1510	Refuse Disposal	Dumpster/Trash Enclosure	0	Each	3	$1,581.63	0	$0.00	0	$0.00
Rep	1810	Lighting	Pole Mounted Lighting	16	Each	0	$0.00	0	$0.00	0	$0.00
Rep	1920	Domestic Water	Site Water Lines	11	LF	0	$0.00	0	$0.00	0	$0.00
Rep	2223	Roofs	Built-Up/Membrane	18	SF	0	$0.00	0	$0.00	0	$0.00
Rep	2240	Roofs	Penthouse	17	SF	0	$0.00	0	$0.00	0	$0.00
Rep	2250	Roofs	Hatches/Skylights	11	Each	0	$0.00	0	$0.00	0	$0.00
Rep	2270	Roofs	Exterior Covered Areas	12	SF	0	$0.00	0	$0.00	0	$0.00
Rep	2370	Walls	Caulking & Sealant	2	LF	0	$0.00	0	$0.00	6126	$106,396.37
Rep	2423	Doors/Exterior	Glass Sliding Doors	6	Each	0	$0.00	0	$0.00	0	$0.00
Rep	2424	Doors/Exterior	Automatic Opener	6	Each	0	$0.00	0	$0.00	0	$0.00
Rep	2425	Doors/Exterior	Rollup Vehicular/Service Door	3	Each	0	$0.00	0	$0.00	0	$0.00
Rep	2430	Windows	Windows	19	SF	0	$0.00	0	$0.00	0	$0.00
Rep	2431	Windows	Storm/Screen Windows	19	SF	0	$0.00	0	$0.00	0	$0.00
Rep	2630	Lighting	Building Mounted Exterior Lighting	12	Each	0	$0.00	0	$0.00	0	$0.00
Rep	2842	Central HVAC	Modular Boiler - Large	20	Each	0	$0.00	0	$0.00	0	$0.00
Rep	3147	Local HVAC	Grilles, HVAC Supply and Return	20	Each	0	$0.00	0	$0.00	0	$0.00
Rep	3160	Fire Protection	Smoke/Fire Detectors	16	Each	0	$0.00	0	$0.00	0	$0.00
Rep	3170	Lighting	Emergency Lighting	16	Each	0	$0.00	0	$0.00	0	$0.00

Add Replacement, Marketability, and Accessibility Needs

When calculating future Development/AMP costs, you may need to add additional line items to the Cost Projection Schedule to compare different costs for the same types of items, or to compare existing components with other components that may add functionality

As new items are added, the Cost Projection Schedule adjusts to allow the new costs to be compared over the 20 year timeline.

Site and building systems can be replaced or modernized to increase the overall value, add functionality to existing components, as well as add accessibility features. In order to more easily distinguish between various components, line items containing assessment data are displayed in the following color codes:

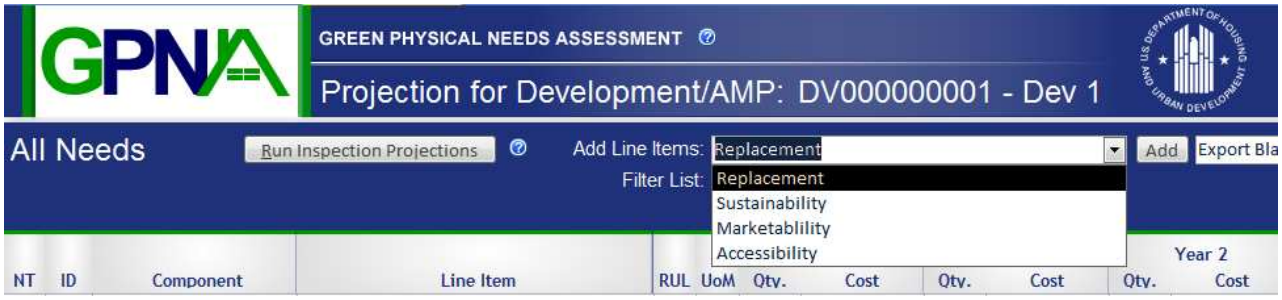
Sustainability—green

Marketability/livability—blue

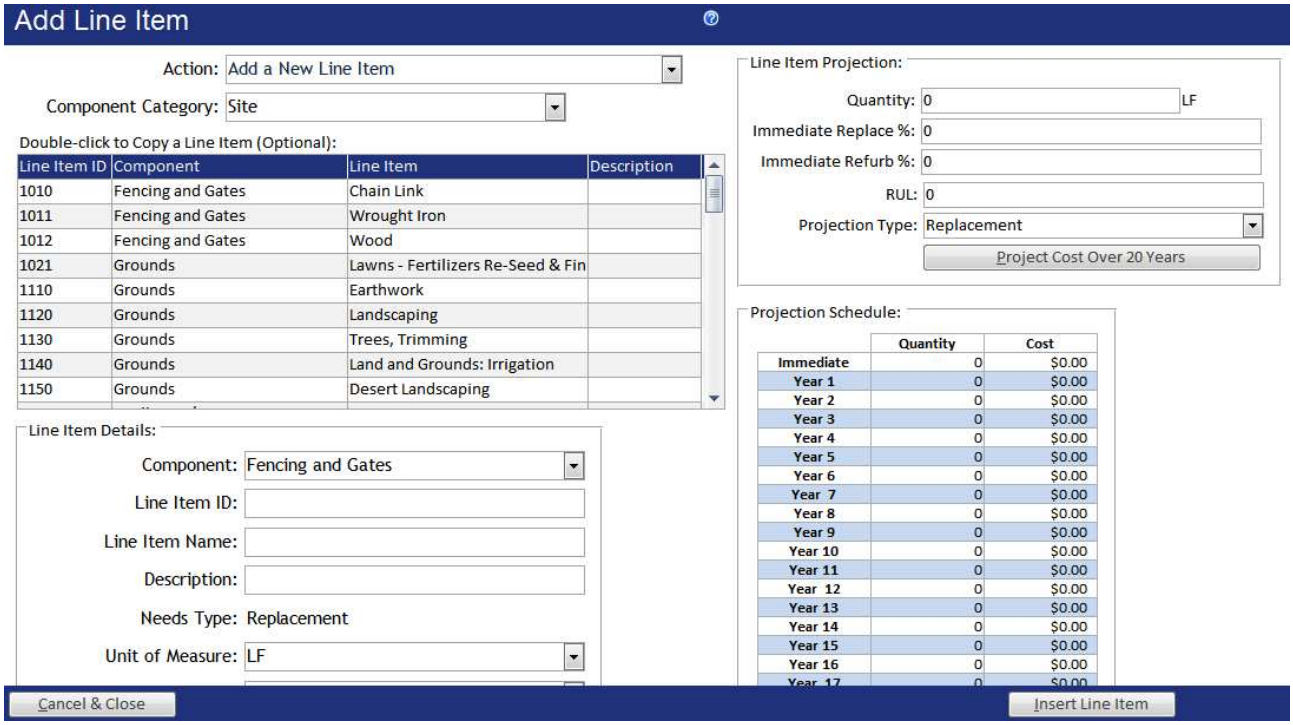
Accessibility—yellow

To add Development/AMP needs to the Cost Projection Schedule:

8) When the Cost Projection screen opens, select the type of needs from the **Add Line Items** drop-down menu and click the **Add** button.



The Add Line Item screen will appear:



9) Fill in the Line Item Details section on the left of the screen.

Optionally, you can double-click any of the line items listed in the table at the top-left of the screen to automatically populate data into the **"Line Item"** portion of this screen:

- **Component Category:** The project area where the item is used.
- **Component:** The list of items that are used in the project area.
- **Line Item ID:** A unique number used to locate and differentiate line items. This number is only unique to the GPNA tool.
- **Line Item Name:** The name of the component, device, material, or other.
- **Description:** A brief summary of the Line Item's purpose.
- **Unit of Measure:** Square Feet (SF), Linear Feet (LF), Quantity (#)

10) Enter or select the cost details in the Line Item Details section:

- **Cost Data Source:** The origin or source for the Line Item's cost details.
- **Cost Index:** The reference used to determine the costs of the item.
- **Cost Index Reference:** The reference ID used in the Cost Index for the item.
- **Replacement Cost:** The amount needed to fully replace one unit of the item.
- **Refurbish Cost:** The amount needed to refurbish one unit of the item.
- **Local Multiplier:** The ratio of the average cost and the cost of the item in the area of the Development/AMP location.

11) Enter or select the Estimated Useful Life in the Line Item Details section:

- **EUL Data Source:** The origin or source for the Line Item's EUL details.
- **EUL Index:** The reference used to determine the EUL.
- **EUL Index Reference:** The reference ID used in the EUL Index for the item.
- **Replacement EUL:** The years the item is expected to be used before it must be replaced.
- **Refurbish EUL:** The number of years the item is expected to be useful before it must be repaired or refurbished.

12) Enter the projection data for the Line Item in the highlight or otherwise visually emphasize at the top right of the screen:

- **Quantity:** The total number of units of the Line Item based on the Unit of Measure selected in the Line Item Details section.
- **Immediate Replace %:** The percentage of the Line Item that needs to be replaced at the present time.
- **Immediate Refurb %:** The percentage of the Line Item that needs to be repaired or refurbished at the present time.
- **RUL:** The Remaining Useful Life of the Line Item. This field is zero for new Line Items.
- **Projection Type:** Replacement. Sustainable needs are replacements for existing items.

13) Click the **Project Cost Over 20 Years** button to see the cost timeline for the need.

14) Click the **Insert Line Item** button to add the new Line Item to the Cost Projection Schedule.

The Cost Projection screen updates.

Add/Edit Sustainability Needs

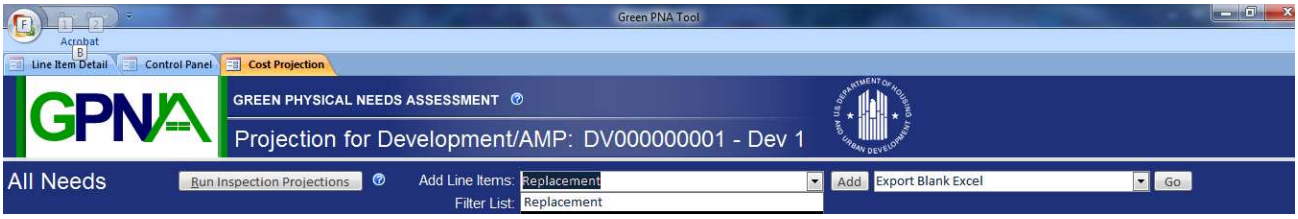
Note: Energy Audit data will be needed here.

Building and site systems can be replaced with alternative energy saving devices to reduce costs over time. The costs and savings from green components can be viewed on the Cost Projection Schedule.

To add sustainability needs to the Cost Projection Schedule:

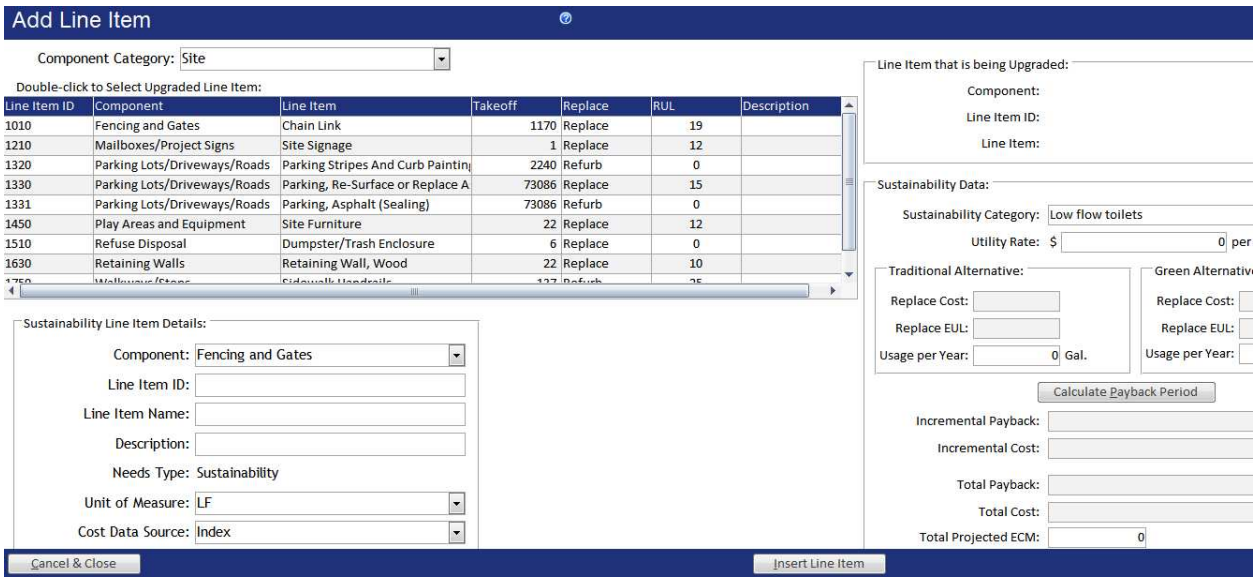
1) From the Control Panel, click the **Cost Projection** button under the Development/AMP Costs and Projections section.

2) When the Cost Projection screen opens, select **Sustainability Needs** from the **Filter List** drop-down menu.



3) When the Cost Projection screen opens, select the type of needs from the **Add Line Items** drop-down menu and click the **Add** button.

The Add Line Item to Projection screen will appear.



4) Fill in the Line Item Details section on the left of the screen.

Optionally, you can double-click any of the line items listed in the table at the top left of the screen (these are items that already appear in the GPNA as replacement items) to automatically populate data into the Line Item Details portion of this screen for the existing item to be substituted for the sustainable item:

- **Component Category:** The project area where the item is used.
- **Component:** The list of items that are used in the project area.
- **Line Item ID:** A unique number used to locate and differentiate line items. This number is only unique to the GPNA tool.
- **Line Item Name:** The name of the device or upgrade.
- **Description:** A brief summary of the Line Item's purpose.
- **Unit of Measure:** Square Feet (SF), Linear Feet (LF), Quantity (#)

5) Enter or select the cost details in the Line Item Details section:

- **Cost Data Source:** The origin or source for the Line Item's cost details.
- **Cost Index:** The reference used to determine the costs of the item.
- **Cost Index Reference:** The reference ID used in the Cost Index for the item.
- **Replacement Cost:** The amount needed to fully replace one unit of the item.
- **Local Multiplier:** The ratio of the average national cost and the specific local cost of the item in the area of the Development/AMP location.

6) Enter or select the Estimated Useful Life in the Line Item Details section:

- **EUL Data Source:** The origin or source for the Line Item's EUL details.
- **EUL Index:** The reference used to determine the EUL.
- **EUL Index Reference:** The reference ID used in the EUL Index for the item.
- **Replacement EUL:** The years the item is expected to be used before it must be replaced.
- **Quantity:** The total number of units of the Line Item based on the Unit of Measure selected in the Line Item Details section.
- **Immediate Replace %:** The percentage of the Line Item that needs to be replaced at the present time.
- **RUL:** The Remaining Useful Life of the Line Item. This field is zero for new Line Items.

7) Green Alternative components are used to replace existing non-green components. Double-click the updated item from the table on the top-left of the screen. The following fields will populate from the selected item within the Line Item section of the screen:

- Component
- Line Item ID
- Line Item

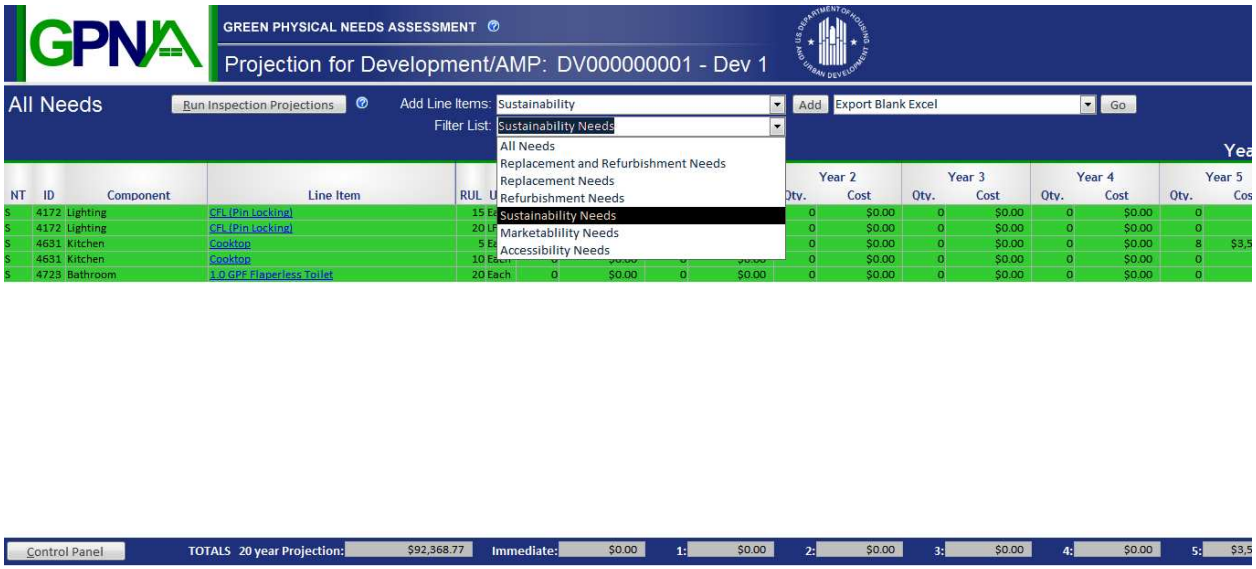
8) Fill in the **Sustainability Data** fields using the Energy Audit data:
   - **Sustainability Category:** The type of alternative energy product.
   - **Utility Rate:** The local price per energy unit. This depends on the Sustainability Category selected.
9) Enter the cost and energy data for the original item in the **Traditional Alternative** section.
10) Enter the cost and energy data for the new item in the **Green Alternative** section.
11) Click the **Calculate Payback Period** button to calculate the savings from the alternative energy investment.
   - **IncrementalPayback Period:** The number of years required for the new sustainable item to repay it's increased cost (above the cost of the standard item) from the energy savings it produces .
   - **Incremental Cost:** The difference in replacement cost of the original item and the sustainable item. This is the cost that will be displayed on the cost projection for the sustainable item.
   - **Total Payback Period:** The number of years required fot he new sustainable item to repay its complete cost from the energy savings it produces (not considering the cost of the standard item)
12) Click the **Project Cost Over 20 Years** button to see the 20-year cost timeline for Sustainability Needs.
13) Click the **Insert Line Item** button to add the new Line Item to the Cost Projection Schedule.

The Sustainability Need will appear on the Cost Projection screen.

Edit a Sustainability Need

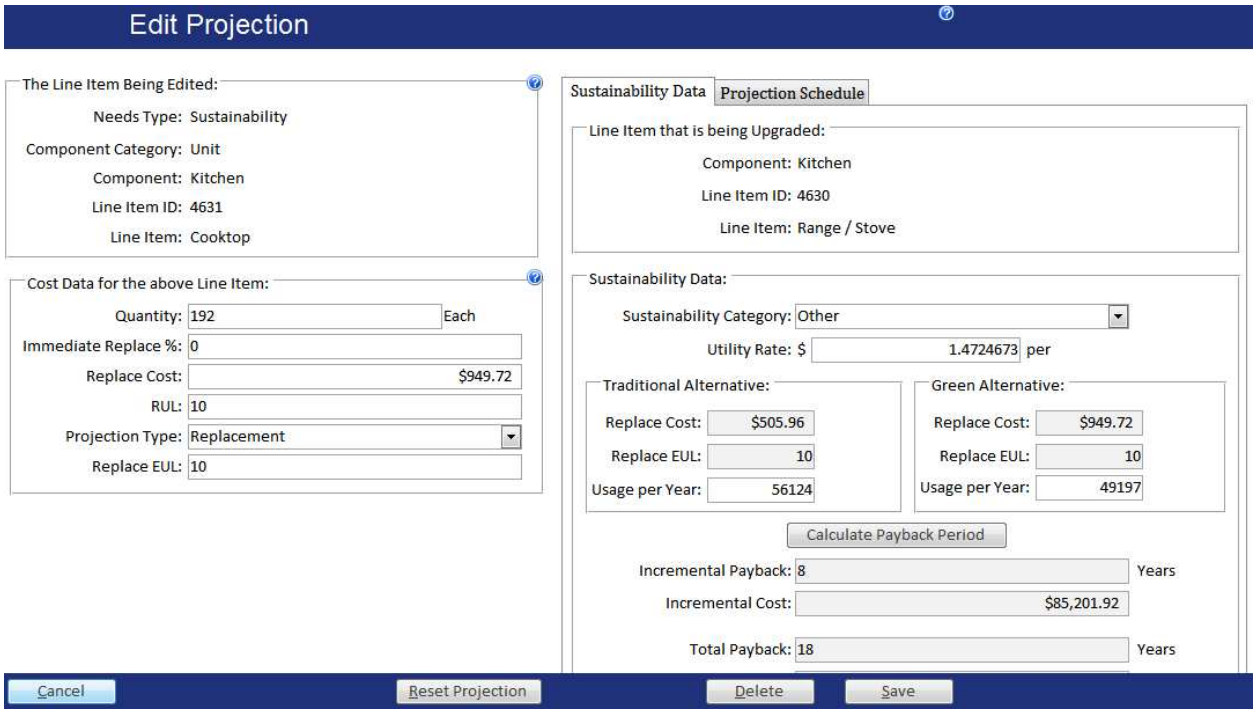
To edit a sustainability need:

1) From the Cost Projection screen, select **Sustainability Needs** from the **Edit Needs Type** drop-down menu and click the **Go** button.



2) When the Sustainability Needs screen appears, click on a line item.

The Edit Projection screen will appear:



3) Alter the data in the fields as necessary. When you are finished, click **Save**. The screen will return to the cost projection page and new item will be displayed If you wish to restore the data back to the original projection data based on the inspection, click **Reset Projection**.

Using the Reports Function and Creating Reports

The Reports Menu is used to view, print, and export summary tables of selected Development/AMP data. The Development/AMP data include the Development/AMP Components, Line Items, GPNA, and Cost Projections.

Available Reports include:

- GPNA Summary
- Dev/AMP Line Item Summary
- Dev/AMP Data
- Dev/AMP Projection Data
- Cost Markup

The GPNA tool allows you to print various reports. These reports include:

- 20-year Accrual of Physical Needs per Development
- Accrual of Refurbishments Scheduled
- Immediate Needs with Comments Gathered from the Survey
- Green Alternatives for Replacement Needs Components
- Marketability/Livability Alternatives for Replacement Needs Components
- Accessibility Components
- Replacement and Resources Schedule
- Overall PHA-wide GPNA Report
- Variance Reports

Generate, Print, or Export Reports

The following reports can be generated, viewed, printed, and exported from within the GPNA tool:

GPNA Summary—The PNA Summary report consists of an overview of projected costs for the grand total of all projects for immediate costs, totals within 5-year increments, the overall total, and the total cost per unit pertaining to the selected PNA. Totals are also separated by an additional sub-report giving line item component category totals.

Dev/AMP Line Item Summary—The Dev/AMP Line Item Summary report provides a summary for each line item of the selected Dev/AMP, such as the take-off unit, replacement cost, RUL, immediate costs, and total cost.

Dev/AMP Markup Report—The Dev/AMP Markup report allows you to use the specified project markup percentage from the cost library to be taken away from both the project projection line item summary and its overall projection data.

Dev/AMP PNA—The Dev/AMP Projection Data report provides the projected costs for a span of 20 years for each line item of the selected Dev/AMP along with the component subtotals and five year interval subtotals. This version of the Dev/AMP Projection Data combines the information from the Dev/AMP Line-item Summary and the Dev/AMP Projection Data for a more detailed Dev/AMP data report.

Dev/AMP Variance Report—The Variance Report assists the PHA in identifying component costs and the EUL that are PHA determined (not based off an approve national building cost index service). This report is for management verification purposes at the local level. Variance Reports provide a more detailed analysis of anomalous PHA results and can help PHAs identify and address problems in their data submission to HUD.

Dev/AMP Replacement Projection—The Dev/Amp Replacement Projection report provides the user with detailed information on a currently selected Dev/AMP by displaying the projected costs for replacement needs. The options for this report include printing and exporting to PDF or XML.

Dev/AMP Sustainability Projection—The Dev/AMP Sustainability Projection report provides the user with detailed information on the currently selected Dev/AMP by displaying the projected costs for sustainability needs. The options for this report include open, print, and exporting to PDF or XML.

Dev/AMP Marketability Projection—The Dev/AMP Marketability Projection report provides the user with detailed information on the currently selected Dev/AMP by displaying the projected costs for marketability needs. The options for this report include open, print, and exporting to PDF or XML.

Dev/AMP Accessibility Projection—The Dev/AMP Accessibility Projection report provides detailed information for a selected Dev/AMP by displaying the projected costs for accessibility needs. The options for this report include open, print, and exporting to PDF or XML.

The Replacement, Sustainability, Marketability, and Accessibility Projections report projected costs for up to 20 years for each line item, as well as component category subtotals and 5 year range subtotals with the user-specified markup percentage deducted from the final amounts for each type of need.

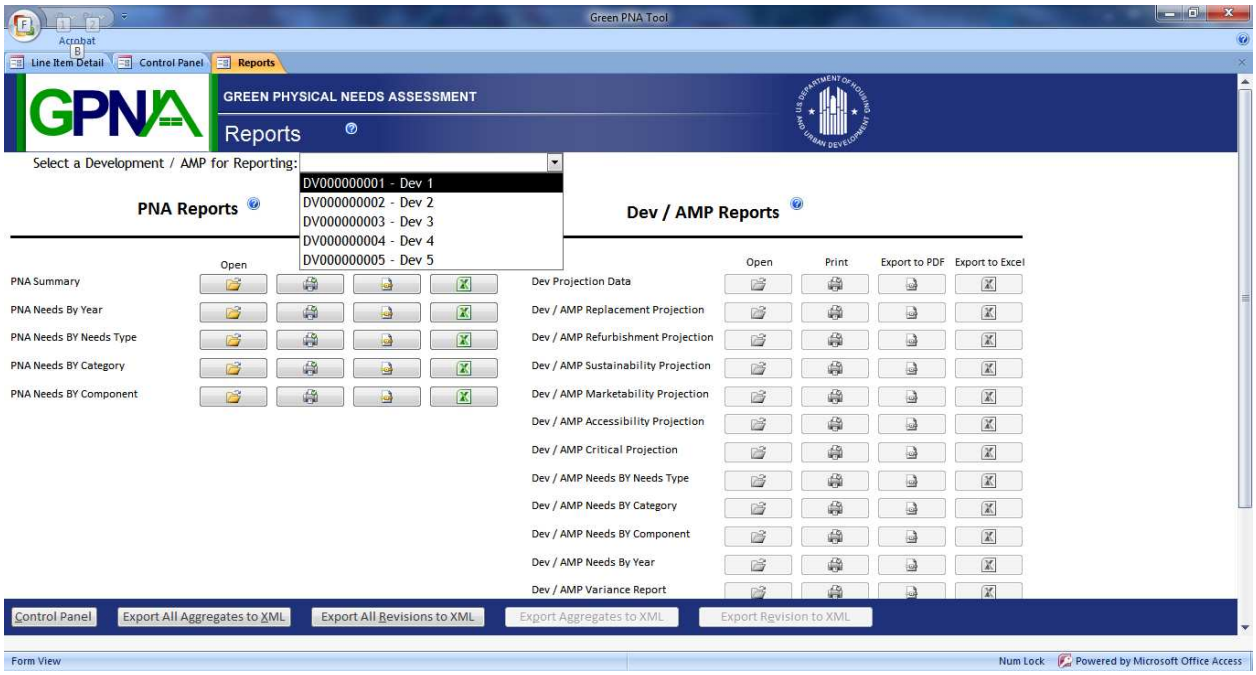
Generating, Printing, and Exporting Reports

To generate, print, or export reports:

1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.

2) Click the **Reports Menu** button in the Reports section of the Control Panel.

3) When the Reporting screen appears, click the **Select a Development/AMP for Reporting** drop-down menu and select a Development/AMP from the list.



4) Depending upon specific needs and desired report, the following task may be performed:

- **Open—**Click the **Open** button to open the report. If the report consists of multiple pages, use the navigation arrows at the bottom of the report screen.
- **Print—**Click the **Print** button to print the report.
- **Export to PDF—**Click the **Export to PDF** button to export and save the report in PDF format.
- **Export to Excel—**Click the **Export to Excel** button to export and save the report into a Microsoft Excel file.

Conduct Quality Assurance Procedures

Quality assurance (QA) should be an integral part of every GPNA.

The GPNA is very valuable for future expenditure planning. As a result, estimates, measurements, quantities, and data entry should be confirmed in developing the GPNA process, as well as while conducting the assessment. Recommended QA activities include:

- Select 2 components per Dev/AMP and verify quantities a second time to ensure component counts are accurate.
- Select 2 other components per Dev/AMP and double check the EUL assumptions.
- Select 2 additional components per Dev/AMP (6 components over these first three QA activities) and double check the cost assumptions per unit of quantity or measurement.
- Select one Dev/AMP and check all math and calculations.
- Review data from a different Dev/AMP and review application of GPNA results to the Annual Plan. (If the PHA only has one AMP, review that AMP for all QA activities.)
- Confirm submission of GPNA data with HUD.

Submit Data to HUD Central Database

The submission to HUD is an .xml data file that is machine readable. The basic information that is transmitted in the data file is the summary level information found on the GPNA tool Dashboard. **Housing Authorities must export and email the XML file for every Development/AMP in their portfolio or may upload the XML files to EPIC when this function becomes available (summer, 2013).**

Navigate to the Reports Menu from the Control Panel to access all PNA and Development/AMP Reports. The Reports Menu allows you to open, print, and export all reports to PDF and XML.

The Export XML button within the report menu produces a file to be emailed to **PNADATA@HUD.GOV** as an attachment. This is the housing authority's GPNA data submission for the selected Dev/AMP. Housing authorities are encouraged to attach XML files for all Dev/AMPs to one email message, but may submit only the completed AMPs in cases where they may have many AMPS or AMPS with special circumstances-you should not hold up your entire submittal.

Annual Updates

The purpose of the annual update is to provide transparency for the modernization process occurring at the local level and to compare needs and their potential funding sources. During the annual update timeframe updated data is provided to HUD using an established protocol. This annual updating process is intended to be performed as a management function without the need for additional assessment, inspections, energy auditing, or procurement of services.

The annual update shows the replacement or refurbishment of building systems and components completed for the year and the modernization funding source. Examples of funding sources include Capital Funds, Operating Funds, private funding, other government funds, state funding, and local funding.

The Annual Update reports on work that was done on the items reported in the full GPNA. Work (i.e., expenses incurred) outside of the projected schedule must be reported in the Annual Update. **The underlying data for the GPNA (EUL, RUL, quantities, etc.) do not change as part of the Annual Update** – this data will be updated in the next full GPNA (conducted every 5 years). A PHA wanting to use the GPNA tool to continuously monitor and record such changes is encouraged to do so—it is a good practice and makes subsequent PNAs easier to perform. **The PHA will need to maintain the integrity of the original GPNA tool used for annual reporting, thus such continuous updating should be done in a duplicate copy of the GPNA tool to minimize the potential for loss of the submittal data** (see “Advanced Content: Multiple Users and Multiple PHAs” in the Getting Started chapter).

In instances where data for partial replacements have different costs than projected, this difference will be accounted for by recording actual cost data within the GPNA tool for work performed in the annual update. Furthermore, the GPNA tool will calculate the difference between the estimated cost and actual cost, and the difference in component quantities.

Unlike the full GPNA, the Annual Update is not validated against PIC. The Annual Update reports on work that was done on the items reported in the full GPNA, but the reporting is not tied to a specific inventory configuration. We recognize that there will be PIC inventory changes during the interim periods between the full PNAs being performed every 5 years, but inventory changes should not be reported in the annual update. Some PHAs will face ambiguities due to significant inventory configuration changes, and in those cases the PHA should work with the HUD Field Office to crosswalk data and report as much of the completed work as possible in the annual update.

You should consider coordinating your annual plan and GPNA annual update data to get the most functionality from the GPNA. Also consider using the GPNA tool for a strategic planning mechanism – it allows you to keep up-to-date records of work performed on an annual basis. As noted above, you will need to maintain the integrity of

the original GPNA Tool that you use for annual reporting, so updates to underlying data (inventory, EULs, RULs, quantities, etc.) should be done in a duplicate copy of the GPNA Tool.

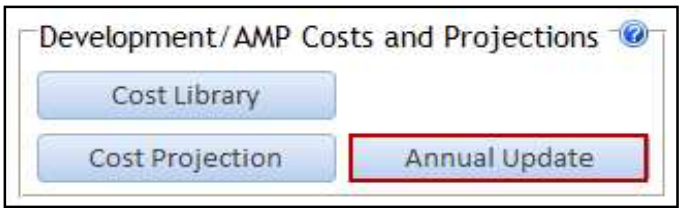
Set the Year of the Annual Update

To begin the Annual Update:

1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.

2) Select a Development/AMP from the Development/AMPs column.

3) Click the **Annual Update** button in the Development/AMP Costs and Projections section.



The Select Year of Annual Update screen will appear:

4) Select the **Year** from the drop-down menu.

Note: The Year drop-down menu records previous Annual Updates. You must first finalize an Annual Update before you can initiate a new Annual Update.

5) Click the **Next** button to continue, or click the **Delete** button to remove the selected year.

The **Demo/Disposition** screen will appear:

a) Select **No** if the Development/AMP has **not** been approved for Demolition/Disposition, and click on Next.

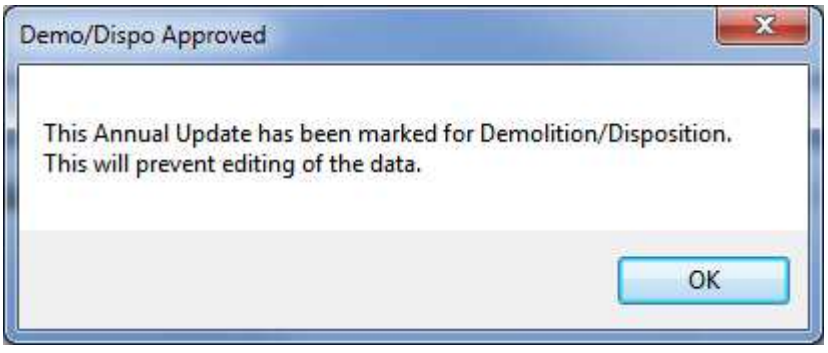
The **Annual Update** screen will appear:

Needs Type	Line Item ID	Component	Line Item	Projection Type	RUL	Unit of Measure	Backlog Quantity	Backlog Cost	2012 Qty.	2012 Projected
Replacement	1010	Fencing and Gates	Chain Link	Replacement	19	LF	0	$0.00	0	$0.00
Replacement	1210	Mailboxes/Project Signs	Site Signage	Replacement	12	Each	0	$0.00	0	$0.00
Replacement	1320	Parking Lots/Driveways/Roa	Parking Stripes And Curb Painting (Traffic Pair	Refurbishment	0	LF	2240	$392.31	0	$0.00
Replacement	1330	Parking Lots/Driveways/Roa	Parking, Re-Surface or Replace Asphalt Paving	Replacement	15	SF	0	$0.00	0	$0.00
Replacement	1331	Parking Lots/Driveways/Roa	Parking, Asphalt (Sealing)	Refurbishment	0	SF	73086	$42,667.61	0	$0.00
Replacement	1450	Play Areas and Equipment	Site Furniture	Replacement	12	Each	0	$0.00	0	$0.00
Replacement	1510	Refuse Disposal	Dumpster/Trash Enclosure	Replacement	0	Each	6	$3,163.26	0	$0.00
Replacement	1630	Retaining Walls	Retaining Wall, Wood	Replacement	10	SF	0	$0.00	0	$0.00
Replacement	1750	Walkways/Steps	Sidewalk Handrails	Refurbishment	25	LF	137	$8,144.69	0	$0.00
Replacement	1810	Lighting	Pole Mounted Lighting	Replacement	12	Each	0	$0.00	0	$0.00
Replacement	2220	Roofs	Asphalt Shingles	Replacement	19	SF	0	$0.00	0	$0.00
Replacement	2261	Roofs	Roof Drainage Exterior (Gutter And Fascia)	Replacement	12	LF	0	$0.00	0	$0.00
Replacement	2261	Roofs	Roof Drainage Exterior (Gutter And Fascia)	Replacement	18	LF	0	$0.00	0	$0.00
Replacement	2270	Roofs	Exterior Covered Areas	Replacement	20	SF	0	$0.00	0	$0.00
Replacement	2270	Roofs	Exterior Covered Areas	Replacement	0	SF	2027	$62,205.43	0	$0.00
Replacement	2430	Windows	Windows	Replacement	13	SF	0	$0.00	0	$0.00

Proceed to Set the Funding Sources.

b) Select **Yes** if the Development/AMP has been approved for Demolition/Disposition, then click on Next.

The Demo/Dispo Approved screen will appear:



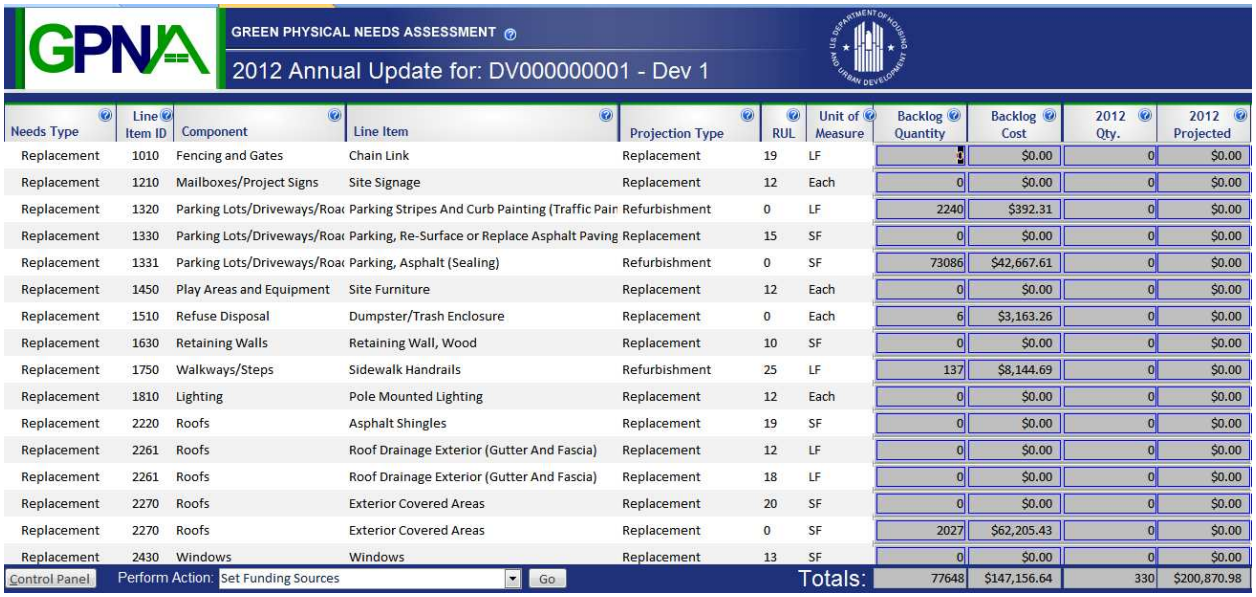
Note: Selecting **Yes** will prevent you from editing data for that Dev/AMP.

Set the Funding Sources

The Annual Update Funding page allows you to add multiple funding sources to the Dev/AMP for the current year. Each funding source has an associated amount, and multiple sources can be added or deleted.

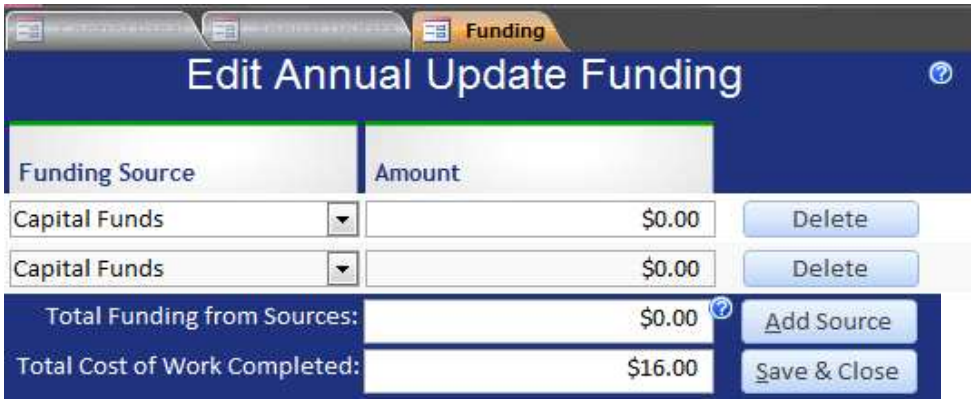
To edit Annual Update Funding:

1) From the Control Panel, click the **Annual Update** button in the Development/AMP Costs and Projections section and select the year of the Annual Update. The Demo/Dispo screen appears first, select "Yes" or "No" as described above. Then the Annual Update screen will appear:



Needs Type	Line Item ID	Component	Line Item	Projection Type	RUL	Unit of Measure	Backlog Quantity	Backlog Cost	2012 Qty.	2012 Projected
Replacement	1010	Fencing and Gates	Chain Link	Replacement	19	LF	1	$0.00	0	$0.00
Replacement	1210	Mailboxes/Project Signs	Site Signage	Replacement	12	Each	0	$0.00	0	$0.00
Replacement	1320	Parking Lots/Driveways/Roa	Parking Stripes And Curb Painting (Traffic Pair	Refurbishment	0	LF	2240	$392.31	0	$0.00
Replacement	1330	Parking Lots/Driveways/Roa	Parking, Re-Surface or Replace Asphalt Paving	Replacement	15	SF	0	$0.00	0	$0.00
Replacement	1331	Parking Lots/Driveways/Roa	Parking, Asphalt (Sealing)	Refurbishment	0	SF	73086	$42,667.61	0	$0.00
Replacement	1450	Play Areas and Equipment	Site Furniture	Replacement	12	Each	0	$0.00	0	$0.00
Replacement	1510	Refuse Disposal	Dumpster/Trash Enclosure	Replacement	0	Each	6	$3,163.26	0	$0.00
Replacement	1630	Retaining Walls	Retaining Wall, Wood	Replacement	10	SF	0	$0.00	0	$0.00
Replacement	1750	Walkways/Steps	Sidewalk Handrails	Refurbishment	25	LF	137	$8,144.69	0	$0.00
Replacement	1810	Lighting	Pole Mounted Lighting	Replacement	12	Each	0	$0.00	0	$0.00
Replacement	2220	Roofs	Asphalt Shingles	Replacement	19	SF	0	$0.00	0	$0.00
Replacement	2261	Roofs	Roof Drainage Exterior (Gutter And Fascia)	Replacement	12	LF	0	$0.00	0	$0.00
Replacement	2261	Roofs	Roof Drainage Exterior (Gutter And Fascia)	Replacement	18	LF	0	$0.00	0	$0.00
Replacement	2270	Roofs	Exterior Covered Areas	Replacement	20	SF	0	$0.00	0	$0.00
Replacement	2270	Roofs	Exterior Covered Areas	Replacement	0	SF	2027	$62,205.43	0	$0.00
Replacement	2430	Windows	Windows	Replacement	13	SF	0	$0.00	0	$0.00
						Totals:	77648	$147,156.64	330	$200,870.98

2) Click the **Perform Action** drop-down menu located at the bottom of the screen and select **Set Funding Sources**. Click the **Go** button. The **Edit Annual Update Funding** window will appear:



3) Select **Add Source** from bottom of screen, **Funding Source** fields will appear in the **Funding Source** and **Amount** columns.

4) Click the **Funding Source** drop-down menus to change the funding source.

5) Enter a new value in the **Amount** column for the changes in funding.

6) Click the **Delete** button to the right of the Funding Source to remove that specific source.

7) Click the **Add Source** button at the bottom of the window to add a new entry to the **Funding Source** column.

8) Click the **Save & Close** button at the bottom of the window to save the changes and close the window.

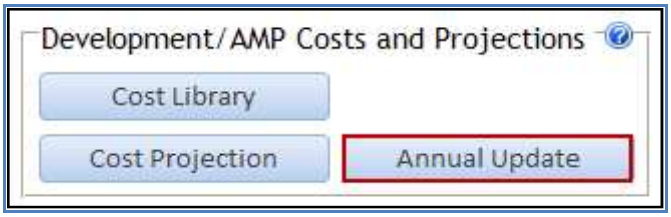
Finalize the Annual Update

You must first finalize an Annual Update before you can initiate a new Annual Update.

To finalize an Annual Update:

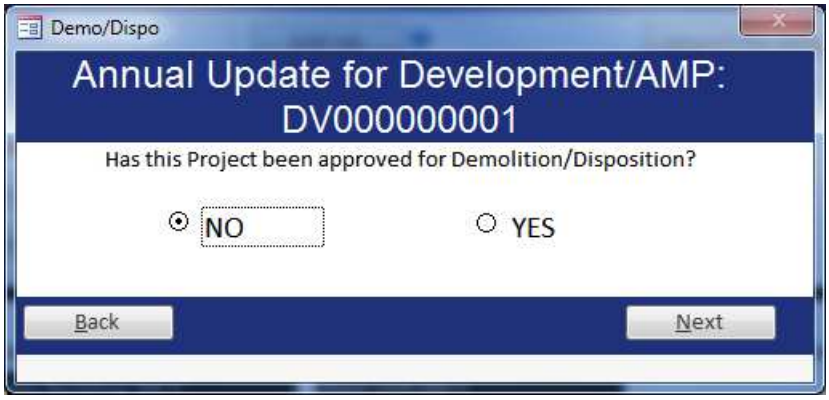
1) Start in the Control Panel,

2) Click the **Annual Update** button in the Development/AMP Costs and Projections section.



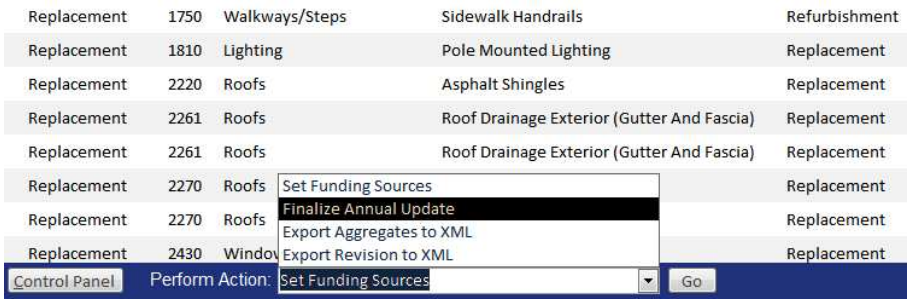
3) Select the year of the Annual Update.

4) Select Next to continue, and the Demo/Dispo screen will appear.



5) Select **No** if the Development/AMP has not been approved for Demolition/Disposition. Continue to the Annual Update screen to edit line items as described above. Make the necessary changes and edits to the Annual Update report, including setting the Funding Sources.

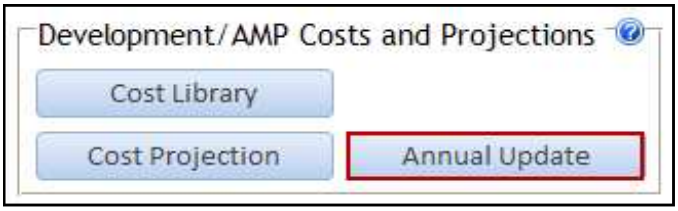
6) Click the **Perform Action** drop-down menu located at the bottom of the screen and select **Finalize Annual Update**. Click the **Go** button.



7) When the **Finalize** window appears, click the **Yes** button to save all changes and altered data to the Development/AMP.

Export Aggregates to XML

To export aggregates to XML:

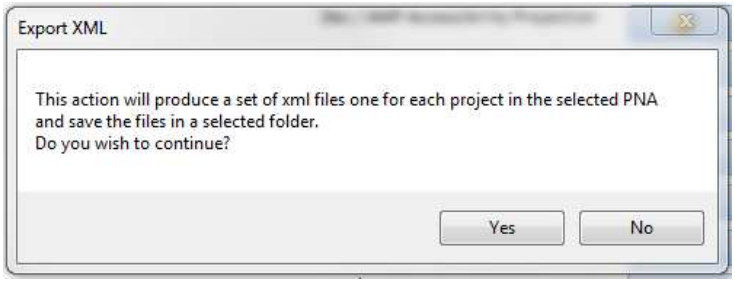


1. From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.
2. Select a Development/AMP from the Development/AMPs column.
3. Click the Annual Update button in the Development/AMP Costs and Projections section.

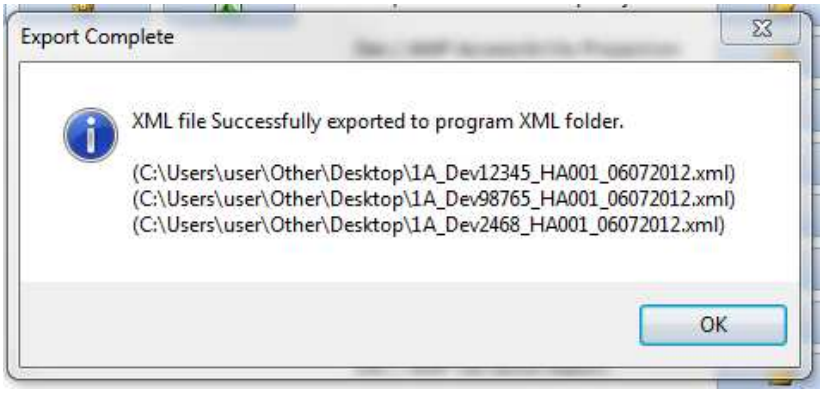
4. Select the Year from the drop-down menu. Click the Next button to continue to the Demo/Dispo screen. Select No if the Development/AMP has not been approved for Demolition/Disposition, and continue to the Annual Update screen.

Needs Type	Line Item ID	Component	Line Item	Projection Type	RUL	Unit of Measure	Backlog Quantity	Backlog Cost	2012 Qty.	2012 Projected
Replacement	1010	Fencing and Gates	Chain Link	Replacement	19	LF		$0.00	0	$0.00
Replacement	1210	Mailboxes/Project Signs	Site Signage	Replacement	12	Each	0	$0.00	0	$0.00
Replacement	1320	Parking Lots/Driveways/Roac	Parking Stripes And Curb Painting (Traffic Pair	Refurbishment	0	LF	2240	$392.31	0	$0.00
Replacement	1330	Parking Lots/Driveways/Roac	Parking, Re-Surface or Replace Asphalt Paving	Replacement	15	SF	0	$0.00	0	$0.00
Replacement	1331	Parking Lots/Driveways/Roac	Parking, Asphalt (Sealing)	Refurbishment	0	SF	73086	$42,667.61	0	$0.00
Replacement	1450	Play Areas and Equipment	Site Furniture	Replacement	12	Each	0	$0.00	0	$0.00
Replacement	1510	Refuse Disposal	Dumpster/Trash Enclosure	Replacement	0	Each	6	$3,163.26	0	$0.00
Replacement	1630	Retaining Walls	Retaining Wall, Wood	Replacement	10	SF	0	$0.00	0	$0.00
Replacement	1750	Walkways/Steps	Sidewalk Handrails	Refurbishment	25	LF	137	$8,144.69	0	$0.00
Replacement	1810	Lighting	Pole Mounted Lighting	Replacement	12	Each	0	$0.00	0	$0.00
Replacement	2220	Roofs	Asphalt Shingles	Replacement	19	SF	0	$0.00	0	$0.00
Replacement	2261	Roofs	Roof Drainage Exterior (Gutter And Fascia)	Replacement	12	LF	0	$0.00	0	$0.00
Replacement	2261	Roofs	Roof Drainage Exterior (Gutter And Fascia)	Replacement	18	LF	0	$0.00	0	$0.00
Replacement	2270	Roofs	Exterior Covered Areas	Replacement	20	SF	0	$0.00	0	$0.00
Replacement	2270	Roofs	Exterior Covered Areas	Replacement	0	SF	2027	$62,205.43	0	$0.00
Replacement	2430	Windows	Windows	Replacement	13	SF	0	$0.00	0	$0.00
Control Panel	Perform Action:	Set Funding Sources	Go			Totals:	77648	$147,156.64	330	$200,870.98

5. Click the Export All Aggregates to XML button; the Export XML screen will appear.



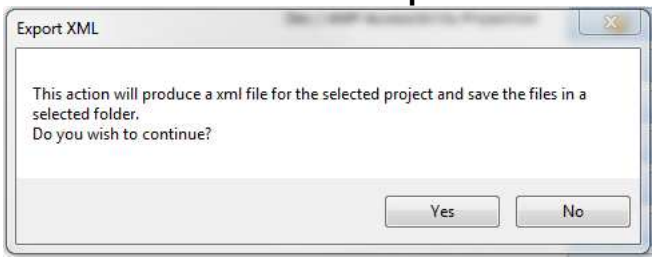
6. Select Yes to continue (if you select No, you will be automatically redirected to the Reports Menu).
7. The Browse for Folder screen will appear. Identify or create a local folder on your PC where you want to save the XML export file. When the export completes, the following pop-up will appear notifying you of the completion of the export and where you can find the file on your PC:



Export Revision to XML

To export an Annual Update revision to XML:

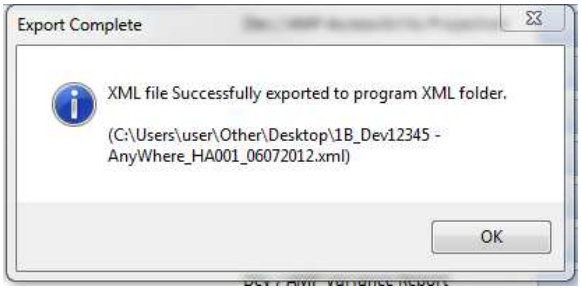
1) Follow the first four steps for Exporting Aggregates to XML (above). On the Annual Update screen, click the **Export Revision to XML** button and the **Export XML** window will appear.



2) Select NO to cancel the export and return to the Reports Menu. Select Yes to confirm you wish to export to XML.

3) Identify or create a local folder within the **Browse for Folder** screen and select **OK** to continue.

4) Once the export is complete the following pop-up will notify you of the file location on your PC.



Appendix

Definitions

Accessibility Needs Component— Refers to capital improvements which are non-existing and deemed necessary to establish or add functional accessibility. Existing accessibility components are recorded within the Replacement Needs Component.

Building/Site Components—A compilation of building and site items identified using CFFP, Green PCA, and other building-industry components. The list is divided into the following categories; site, building systems, building exteriors, units and common areas.

Components—There are four component areas that make up a complete GPNA and contribute to an accurate aggregated capital needs number. These include: Replacement needs, Accessibility needs, Marketability /livability needs and Sustainability needs.

Component Unit Cost—Based on industry developed cost indices. PHAs will select a standard, nationally recognized cost index; such as R.S. Means[3] or Marshall & Swift. There is no perceptible advantage to utilizing multiple cost indices.

Cost Library—Serves as the repository of costing and EUL data for the GPNA.

Estimated Useful Life (EUL) —Refers to the length of time (in years) for which a building system or component is expected to remain functioning. EUL values are recorded as a part of the GPNA cost and EUL component libraries in the GPNA tool.

Local Multiplier—Conversion factor identified to aid in the conversion of average national cost values based on National Indices to local price estimates – to allow for more accurate cost projections.

Marketability/Livability Needs Components—Refers to capital improvements, which add new functionality not previously present, or those improvement which promote occupancy by retaining current and attracting new tenants.

Refurbishment—A comprehensive repair activity of a building system or component that is beyond the normal scope of general maintenance, and extends the estimated useful life of the building system or component. Extension of the estimated useful life of refurbished building systems or components must be at least 50% of the replacement's estimated useful life.

Replacement Needs Components—Refers to capital improvements made to standard building/site building systems components and serves as baseline of component conditions of all basic building systems.

Soft Costs— (Overhead, general conditions, profit) should be included by the PHA in their submitted costs. Soft costs are included in estimates provided by industry specialists (e.g., R.S. Means). For most cost indices, estimations include materials, labor, equipment, general conditions, overhead, and profit. Other soft costs such as A&E, inflation administrative fees, and expenses for relocation should not be included in a PHA's estimations in its GPNA.

Sustainability Needs Components— Serves as a data receptacle of energy audit information within the GPNA. As such, the sustainability needs component data will be coordinated with the data from an energy audit that should be conducted in conjunction with the GPNA.

Substandard—Condition rating denoting components which no longer meet local building code standards, affordable housing marketplace standard, or less than total development cost (TDC) quality.

Sample RFP Scope for 3rd Party Assessor

Sample Request for Proposals

Physical Needs Assessments

Invitation

The Housing Authority of _____ with its primary address at _____ is seeking the services of a consulting firm to provide services in (either) 1- developing an initial Green Physical Needs Assessment (GPNA) of the _____'s housing stock; or 2- update an existing GPNA using the Department of Housing and Urban Development's (HUD) required criteria, per PIH #_____.

Description of Agency

The _____ Agency is a public body organized under the laws of the State/Commonwealth of _____. The Agency consists of _____ public housing units, _____ Housing Choice Vouchers, _____ site based Housing Choice vouchers, and _____ units of affordable housing.

The agency has _____ number of developments that will be part of this assessment.

Bidder Qualifications

Five years of experience with inspections of building systems including systems, roofs, structural components, living spaces, plumbing, electrical, HVAC, building envelope, emergency systems, elevators, community and program spaces, offices, and grounds and other amenities.

Demonstrated track record of other contracts or similar services

Experience with cost estimating

Knowledge of applicable local and state building codes and ordinances

Knowledge of Section 504 and American with Disabilities Act

Scope of Services

The purpose of this solicitation is to select a qualified firm to perform a green physical needs assessment (GPNA). The GPNA will consist of a physical inspection of all __#___ identified properties. The selected contractor will provide a full range of services including evaluating the existing conditions of the housing stock including a random selection of units, common areas, offices, and program areas.

All identified physical improvements will meet or exceed the HUD mandatory standards, and those established by local health, safety, and building codes.

At a minimum, the goal of the GPNA is to identify and provide a description of all physical improvements that will be required to bring the property back to a level comparable with “as built”, to the degree reasonably possible based on available components and building age. The effort should provide the Agency with the information necessary to ensure long term physical viability and in a manner suitable for planning and budgeting purposes. Data shall be in a format suitable for HUD reporting requirements.

Specific scope components:

1) Follow the requirements and guidelines established by HUD in PIH #_____ which describes the required approach to GPNAs.
2) Perform interviews as needed with knowledgeable people as to the existing documents, plans, building histories, maintenance records, REAC scores, etc. of each property.
3) Identify all development components that will be part of the assessment.
4) Establish a sampling methodology for units that will include 10% of all units per property. The sample should also include at least 1 of each apartment size in each building type. Units must be distributed so that a variety of conditions will be evaluated (top floor units, corner units, areas where weathering occurs, etc.). Section 504 units will be included so that they are also represented equitably in the sampling methodology including locations and bedroom sizes.
5) Establish a methodology that will sample common lobby areas and corridors.
6) Establish a plan to inspect 100% of site, all systems, paving and grading, building exteriors/envelope, finishes, program areas, offices, basements, utilities, laundry facilities, mechanical areas, sprinklers, emergency systems, security, crawl spaces, etc. Please note if individual units have individual HVAC, basements, etc, then these will be part of the 10% sample, except in cases where there may be atypical components which should be assessed individually.
7) As part of the assessment, each individual component will receive an estimate of Expected Useful Life (EUL).
8) As part of the assessment, each individual component will be provided with a replacement cost on an individual component and for a total of those components. (Ex: per window and per window times all similar windows)
9) Each area that is designated as part of Section 504 or American with Disabilities Act (ADA) requirements will be inspected to assure the components are functioning per their purpose. Note a regulatory compliance review is not required for these units or areas, just a functionality and EUL assessment.

10) Upon completion of the inspections, a report will be provided to the Agency in narrative and spreadsheet forms that meets HUD and Agency requirements and will be in both paper and electronic format per their (HUD) requirements.

11) The assessment is of observable components and destructive testing is not anticipated and would only occur with prior Agency approval.

12) Any deficiencies that are identified and which could have an impact on health and safety will be brought to the attention of the Agency immediately.

Description of Agency Housing Stock

The housing stock to be assessed consists of:

Development 1 _____

Address _____

Total Units _____ Building type(s)(per HUD PIC) _____

Unit mix 0 bedroom ___ 1-bedroom ___ 2-bedroom ___ 4-bedroom ___ 5-bedroom ___ 6-bedroom____

Development acreage _____ Parking spaces _____

Play areas _____

Offices, community buildings, storage buildings _____

Development 2 _____

Address _____

Total Units _____ Building type(s)(per HUD PIC) _____

Unit mix 0 bedroom ___ 1-bedroom ___ 2-bedroom ___ 4-bedroom ___ 5-bedroom ___ 6-bedroom ____

Development acreage _____ Parking spaces _____ Play areas _____

Offices, community buildings, storage buildings _____